TERRITORY OF AMERICAN SAMOA’S RESPONSE AND ACTION PLAN TO COMBAT THE CORONAVIRUS PANDEMIC

Lolo Matalasi Moliga
Governor of American Samoa

American Samoa Government
A.P. Lutali Executive Building
Pago Pago, American Samoa 96799
March 13, 2020

Honorable David Bernhardt
Secretary
United States Department of the Interior
Washington D.C. 20204

Dear Secretary Bernhardt:

As our Nation struggles to ease the mounting precipitated anguish and fear perpetrated by the escalated spread of the coronavirus in the continental United States and possibly the Territories, we are comforted by the aggressive and bold leadership posture being adopted by President Trump, Vice President Mike Pence and federal leaders reflected in the actions being implemented along with availing financial resources to facilitate the implementation of States and Territories’ mitigation strategies to prevent, contain, treat, and improve the health outcomes for all Americans infected by the Coronavirus.

We appreciate the Weekly Briefings conducted by Vice President Mike Pence and the Federal Coronavirus Task Force, as it gives us Governors the opportunity to receive real-time information on the current actions being implemented along with the chance to ask questions and to seek support. We thank you for your leadership and your leadership team in the Department of the Interior and especially the Office of Insular and International Affairs for ensuring that the needs of the territories are not neglected.

Subsequent to my letter to you on March 9, 2020, I am very pleased to submit for your consideration and hopefully your favorable review of the Territory of American Samoa’s Response and Action Plan aimed to prevent the spread through aggressive surveillance, monitoring, tracking, isolation, and quarantine of suspected individuals; setting protocols for effective treatment of confirmed cases; comprehensive implementation of our community awareness, community outreach, community education, presenting our financial proposal for funds to empower us to fully implement our mitigation strategy; and our economic development impact assessment of the fiscal repercussions consequential to the coronavirus health storm.
American Samoa is highly vulnerable because our current healthcare service delivery system grossly lacks the capacity to address the healthcare fallout from epidemics and pandemics. The incidence of accelerated spread of the coronavirus is also very high because of our social structure and cultural edicts which discourages social distancing. There is great fear that our healthcare service delivery system could collapse if the projections and estimates on the percentage of people who will be infected in any community hold true. There is only one hospital in American Samoa and the nearest U.S. Healthcare institution is Hawaii 2,300 miles away, but then given the highly contagious nature of the coronavirus travel might not be a viable option.

In light of these logistical challenges, American Samoa needs to access tools to allow it to determine the degree and level of infection to guide effective implementation of our mitigation strategies, advisories, and guidance. The recommended primary detection measure is TESTING. Regrettably, the Territory of American Samoa is not on the list for Test-Kits distribution. I earnestly implore your intervention in this issue because of the obvious impact on the efficacy of our mitigation and treatment plans.

Our dependency status on imports (95% consumables & 100% healthcare supplies) also adds to our great susceptibility, thus we appreciate the current sensitivity of the federal leaders in the efforts to keep the supply chains open. While this poses another layer of threat to the spread of the coronavirus, the challenge lies in striking a balance between these opposing issues. This will be our challenge as we try to find an acceptable medium to ensure that the health issue will not contribute to the social and economic collapse and does not compromise our ultimate objective of saving lives.

The final component of the Response and Action Plan is the economic assessment of the effect of the coronavirus’ fiscal impact on American Samoa’s economy with implications on our future prospects and the reciprocal consequences to the American Samoa Government’s financial capacity.

We recognize that the major source of public distress stems from the perspective of the unknown and lacking access to information on the nature of the coronavirus and the appropriate actions they must take to prevent being infected. Thus, we have included in our media strategy to get the information out to our people.

Our experience gained from combating the Measles Outbreak with our containment protocols still in place has given us a head start in our fight to prevent and contain the spread of the coronavirus although there is still so much uncertainty surround this pandemic relative to its very nature.
On behalf of the Leaders and the people of American Samoa I extend to you our gratitude and appreciation for the past and future assistance to empower and embolden our resolve to overcome this health disaster.

Sincerely,

Lolo M. Moliga
Governor of American Samoa

cc: Honorable Mike Pence, Vice President of the United States of America
Honorable Alex M. Azar II, Secretary, Department of Health and Human Services
Honorable Dr. Robert R. Redfield, Director, Centers for Disease Control and Prevention
Honorable Douglas Domenech, Assistant Secretary, Insular & International Affairs
Honorable Chad F. Wolf, Acting Secretary, Department of Homeland Security
Honorable Lemanu Peleti Mauga, Lieutenant Governor of American Samoa
Honorable Aumua Amata Radewagen, Member of Congress
Honorable Gaoteote Palaie Tofau, President of the Senate
Honorable Savali Talavou Ale, Speaker of the House of Representatives
Honorable Larry Hogan, Chairman, National Governor’s Association
Bettilou Taylor, Health and Medicaid Consultant, Washington, D.C.
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Table of Contents

Letter to the Secretary of the Interior

Executive Summary 1

Preamble: Current Health Climate of American Samoa 3

American Samoa’s COVID-19 Response & Action 5

Prevention, Surveillance, Monitoring, Detection, Testing, & Quarantine Protocols 6

Protocols, Advisories and Guidelines for Isolation and Treatment 22

Travel Advisories and Guidance 36

Advisory and Guidance for Schools and Daycare Centers 37

Human Resources Employment Advisories and Guidance 40

Advisories and Guidance for Senior Citizens 42

Dial-A-Ride Guidance and Advisories 44

Public Awareness and Education Campaign 44

Financial Proposal 45

Economic Impact of Measles and Coronavirus Outbreak 46

Appendix:

Coronavirus Task Force & Working Group

Telecommunications Advisory

Territorial Administration on Aging Advisory

Department of Public Works Advisory

American Samoa Community College Immediate Action Plan

National Pacific Insurance Advisory
EXECUTIVE SUMMARY

The American Samoa’s Territorial Wide Response and Action Plan is prepared to clearly outline the required protocols, guidance, and advisories to combat the entry, prevent community spread, and provide the most effective treatment for those infected by the Coronavirus.

As of March 12, 2020, no case of coronavirus has been detected, reported, or confirmed. Thus, while our ultimate desire is to prevent the entry of the coronavirus into our territory supported by the aggressive prevention protocols which have been declared and implemented, American Samoa’s Territorial Wide Response and Action Plan is fashioned assuming the posture that the coronavirus has already reached our shores. This perspective has been adopted to forge the assessment of our healthcare infrastructure capacity whether it can respond efficaciously in mitigating the effects of the coronavirus on our people, our community, our economy, and our society.

Moreover, the Territory of American Samoa is located 2,300 miles Southeast of Hawaii which is the nearest U.S. Jurisdiction, and 5,000 miles to the West Coast of the United States Continental. This remote characteristic presents many difficult challenges which compel us to be as self-sufficient as possible and practical. Susceptibility to surface and air transportation is significant heightening our vulnerability and dependence on Hawaii and other states of the Union for assistance as 95% of our consumables and 100% of our medications are imported. The cost differentia of consumables and medication compared to the States is high shrinking our purchasing capacity.

Prompt detection of the coronavirus through the testing is vital to the determination of subsequent protocols to be implemented. The lapsed time between conducting the test and receiving results is paramount. With American Samoa’s remote location, it is imperative that testing must be conducted on-site to provide preliminary indication as to the status of the person tested. American Samoa is the last territory that has not been issued Test-Kits, thus immediate detection is impossible. The LBJ Tropical Medical Center has CLIA certification hence it should be accorded the privilege to conduct these tests which by current protocols these tests will be sent to Hawaii for analysis. The response time is set at a minimum of 3 days turn-around. These three (3) days or more are critical as it could translate to more people being infected.

The assessment of our healthcare infrastructural system revealed major deficiencies in our capacity to effectively respond to epidemics and pandemics. Healthcare facilities were built to deliver standard health care services not contagious in nature. Additionally, special supplies, equipment, medication are limited given the rarity of epidemics. Consequently, epidemic related supplies and medication must now be specially ordered and stockpiled to avoid unnecessary interruption or delay in rendering services. Special isolation and quarantine facilities must now be built as current infrastructural configuration didn’t account for the needs or to handle epidemics or pandemics.

Although we have embraced the attitude that the coronavirus has reached our shores, we acknowledge the plain fact that the most effective response to prevent the community spread of the coronavirus rests with each resident by practicing and adhering to the common-sense hygiene regimen. Public
awareness, community outreach, and education is vital to empowering all residents of American Samoa to take ownership of their individual responsibility to prevent the spread of the coronavirus.

Financial resources are critically needed to finance all the planned tasks, activities, construction of facilities, purchase of equipment, supplies, COVID-19 test kits, and recruitment of additional healthcare professions to help alleviate the load assumed by regular physicians, nurses, technicians and all support functions of the LBJ Tropical Medical Center and the Department of Health. The territory has been combating the measles epidemic which exhausted its financial resources crippling it from availing financial resources to accommodate the demands of the coronavirus pandemic.

In light of the growing economic fallout, consequential to actions taken to address the coronavirus, an economic impact assessment has been conducted to estimate the financial and economic damages sustained by the Territory of American Samoa. Clearly, American Samoa is significantly affected and it will take years to recover.

The American Samoa’s Territorial Wide Response and Action Plan provides details on the prevention, screening, monitoring, tracing, and isolation protocols. Treatment protocols are also clearly articulated. Advisories and Guidance on special groups have also been defined and incorporated. Community Awareness, Community Outreach, and Community Education Campaign is provided. It also presents the financial proposal outlining the anticipated expenditures which will be incurred in the implementation.
Current Situation

An outbreak of a new coronavirus disease in 2019 (COVID-19) that began in Wuhan, China has been developing since December 2019. This outbreak now includes tens of thousands of infections in China and thousands of confirmed cases in a number of other countries, including hundreds in the United States.

As of 8:00 AM, March 12, 2020 there have been 1,215 total cases detected in 42 states and the District of Columbia. This represents an increase of 792 cases in the past 3 days. Among the identified cases to-date, 125 have been travel-related, 102 were from person-to-person spread, and 988 are still under investigation. An additional 49 cases have been identified among persons repatriated (brought back to the US from abroad) by the US government from Wuhan, China or the Diamond Princess Cruise Ship. There have been 36 total deaths.

Impact to American Samoa

As of March 12, 2020, the Territory of American Samoa has no confirmed Covid-19 case, nor anyone is being quarantined for suspected possible infected by the Covid-19. While this is deemed to be a blessing or a reflection of the aggressive actions being implemented by the American Samoa Government to preempt the entry of the virus, we have adopted the posture that the inevitable will happen given the heightened risk connected with travel emanating from states which have been infected by the COVID-19 which have large Samoan Communities.

Based on our belief that the inevitable will indeed happen the American Samoa Government is now assessing the sufficiency of its capacity to effectively and competently respond positively to any outbreak of the coronavirus in American Samoa.

To provide needed oversight to ensure that real time, practical, and functionable information and recommendations are developed and presented for executive decision on the course of actions to
be pursued to combat the COVID-19, the American Samoa Coronavirus Task Force has been established to assume this responsibility. All major agencies of the American Samoa Government are made members of the American Samoa Coronavirus Task Force (ASCTF).

To support the work of the ASCTF, the Coronavirus Working Group (CWG) is also establish to provide staffing support to conducted need research on best practices in terms of effectiveness are being adopted by States and Territories are available for consideration and possible replication by our local strategies. The CWG will also provide secretariat functions to speed the work of the ASCTF. We have also compelled our D.C. based consultants and lobbyists to ensure that the needs of the Territory of American Samoa are clearly and aggressively articulate to the Congress, the White House, CDC, and the DHHS. General Memorandum No. 135 is included in the Appendix Section of the Response & Action Plan.

The anticipated impact in American Samoa will be overwhelming on our health and economic fallout which is already being felt although no confirmed Coronavirus case has been detected. The primary and immediate impact is on the territory healthcare infrastructure and systems.

a. Medical personnel

DOH and LBJ reshuffle personnel to meet the demand of recent measles outbreak mass vaccination. The shortage of healthcare profession to assist in emergency response while maintaining normal health care operations, presents the need to recruit and hire more physicians and nurses, and to compensate personnel involved in emergency response.

The healthcare professionals are already stretched beyond acceptable standards promulgated by CDC given that many healthcare professionals are working very long hours which certainly impact the quality of the service being provided. LBJ Tropical Medical Center is being financially burdened by chronic overtime given the shortage in nurses. The same is prevalent at the Emergency Room of the only Acute Care Facility on island.

b. Medical Facilities

The Territory of American Samoa lacks the appropriate facilities to quarantine and to treat those infected by the Coronavirus. LBJ currently does not have the capacity to effectively isolate and treat infected patients without presenting unacceptable risks to non-COVID-19 patients. While LBJ is struggling to make room to accommodate COVID-19 patients the probability of propagation is still high. The ideal option is not to place COVID-19 patients in close proximity to the patient population. Accordingly, LBJ is renovating the Behavioral Health Center to cater to the isolation and treatment of the COVID-19. Patients. The cost of this work is projected in the financial section of the Response & Action Plan.

The Department of Health (DOH) is solely assume the responsibility of isolation, monitoring, and caring for infected patients. This quarantine facility was setup to address isolation of suspected measles patients. The capacity is limited to 10 which is deemed grossly inadequate to accommodate the expected spread of the COVID-19 upon confirmation of one person. New facilities are being renovated to address the anticipate growth in the number suspected COVID-19. A new facility is
being constructed specifically for isolation and quarantining of suspected COVID-19 cases. The cost of these infrastructural hardening activities is reflected in our funding request.

c. Medical Supplies

As of this writing, American Samoa has not been given Test-Kits to facilitate the immediate determination of the infected status of a suspected individual exhibiting the COVID-19 Symptoms. This is crucial as American Samoa is remotely located with Hawaii as the nearest U.S. Health facility 2,300 miles away. We lack the healthcare facilities to accommodate everyone with COVID-19 symptoms given that our borders are open for travel from the United States by U.S. passport holder, U.S. Nationals, and residents of American Samoa recognizing the CDC travel advisory.

Protective gowns are critically needed to protect the healthcare professionals and first responders. CDC approved masks are needed as well for the healthcare givers, first responders, and the general public desiring to use masks.

Equipment are needed particularly those addressing the respiratory issues, laboratory equipment for testing and preliminary diagnosis, obtainment of specimens, handling, and transportation of the same to U.S. designate labs for COVID-19 analysis.

Standard medical supplies are needs as well to ensure maintenance of a sufficient stock to sustain our healthcare response to combat the coronavirus. The cost of facilities, equipment, masks, gowns, and supplies are reflected in the financial request section.

Current Challenges:

The geographic location of the Territory of American Samoa creates severe logistical challenges which magnify operational issues exacerbating the status of healthcare infrastructural platform, human resources capacity and capability, operating supplies, financial resources, position within the Pacific Region, status within the federal family hierarchy, and the uniqueness of the cultural setting which ongoing family gatherings.

American Samoa’s COVID-19 Response & Action Plan

The Response & Action Plan content contains protocols and advisories recommended by the Department of Health, LBJ Tropical Medical Center, Medicaid Office, Department of Education, American Samoa Community College, Department of Human and Social Services. Territorial Administration on Aging, the Department of Public Works, Department of Youth and Women, Department of Treasury, Department of Human Resources, Department of Local Government, Office Planning and Budget, Office of Procurement, Office of Public Information, American Samoa Environmental Protection Agency, Department of Legal Affairs, Department of Port/Airport Administration, Department of Commerce, and the Veterans Administration Health Clinic in American Samoa.

The approval of this Response & Action Plan by the Governor and the Lieutenant Governor will provide guidance to the entire territory regard steps to take to preempt being infected by the
Coronavirus. Judicious note should be taken that these protocols and advisories will change as the status of the Coronavirus evolves as the entire situation is currently very fluid with continuing metamorphosing. Any changes or amendments to the articulate protocols will be clearly articulated to the entire community.

While focus on building the healthcare capacity to respond effectively and positively to curb the spread of the coronavirus, equal attention is placed on developing and implementing a community awareness and educational campaign to empower all the residents of American Samoa to be vigilant and diligent in adopting all hygiene advisories presented in this Response & Action Plan.

1. Prevention, Surveillance, Monitoring, Detection, Testing, & Quarantine Protocols:

The success of the prevention of the Novel Coronavirus stems from the enforcement of the situational changing "DOH Travel Advisory" under the authority vested through the Governor's Public Health Emergency declaration and the Title 13 Health Economics Welfare Services, Chapter 2 American Samoa Emergency Health Powers Act, 13.0215.

All Personnel involved in the following procedures will adhere to Prevention and Control measures and PPE Protocols as outlined by the Isolation and Quarantine Plan.

1. Basic Epidemiology:

Infectious Agent

The 2019 Novel Coronavirus (COVID-19) is a virus (more specifically, a coronavirus) identified as the cause of an outbreak of respiratory illness first detected in Wuhan, China.

Transmission

Studies have been conducted to determine the transmission of COVID-19. The studies suggest that the most likely modes of transmission for COVID-19 are droplet and direct person-to-person contact. However, there is evidence that indirect contact and aerosol spread also exist. It also possible that COVID-19 spread from ill people to others through close contact, such as caring for or living with an infected person. Infected people have spread COVID-19 to others in healthcare settings, such as hospitals.

Incubation Period

The incubation period of a novel coronavirus causing severe acute respiratory disease depends on the type of novel coronavirus. The incubation period for COVID-19 is still under study but it is estimated to be 2 to 14 days with a median of 5 to 6 days.

Communicability

The period of communicability for the COVID-19 is not completely understood. For SARS-CoV, epidemiologic and virologic studies and clinical follow-up during the 2003 epidemic indicated that transmission does not occur before the onset of clinical signs and symptoms and the maximum period of communicability is less than 21 days. The period of communicability of COVID-19 is unknown.
Clinical Illness

The novel coronavirus, COVID-19, can cause acute respiratory illness. For confirmed COVID-19 infections, reported illnesses have ranged from infected people with little to no symptoms, to people being severely ill and dying. Symptoms may include: Fever, Cough, Shortness of breath

2. Definitions;

Case definitions for the COVID-19 continues to evolve as clinical and epidemiologic information on these virus changes. Please refer to the novel coronavirus information on CDC’s website for the most recent definitions. The CDC COVID-19 case definitions may be found here: https://www.cdc.gov/coronavirus/COVID-19/clinical-criteria.html.

Clinical Case Definition

Limited data on the clinical presentation of COVID-19 are available; most published clinical information to date is from critically ill patients. At hospital admission, common signs and symptoms include fever, chills/rigors, headache, non-productive cough, dyspnea and myalgia. Other symptoms can include sore throat, coryza, sputum production, dizziness, nausea and vomiting, diarrhea and abdominal pain. Atypical presentations including mild respiratory illness without fever and diarrheal illness preceding development of pneumonia have been reported.

Laboratory Confirmation

- Identification of a novel coronavirus that is different from currently circulating human coronavirus as confirmed by CDC’s laboratory, by public health laboratories using CDC-approved protocols for a specific novel strain or by labs using an FDA-approved test for a specific novel strain.
- Confirmatory laboratory testing requires a positive PCR on at least two specific genomic targets or a single positive target with sequencing on a second.
- Other laboratory confirmation criteria may be defined by CDC for the specific novel coronavirus.

Case Classifications

- **Confirmed**: A confirmed case is a person with laboratory confirmation of COVID-19 infection.
- **Probable**: A probable case is a Patient Under Investigation (PUI) with absent or inconclusive laboratory results for COVID-19 infection who is a close contact of a laboratory-confirmed COVID-19 case. Examples of laboratory results that may be considered inconclusive include a positive test on a single PCR target, a positive test with an assay that has limited performance data available, or a negative test on an inadequate specimen.
• **Suspect (Patient Under Investigation [PUI]):** A person who has both clinical features and an epidemiologic risk should be considered a Patient Under Investigation (PUI) based on one of the following scenarios:

• Fever AND pneumonia or acute respiratory distress syndrome (based on clinical or radiological evidence) AND EITHER:
  
  ➢ A history of travel from countries with known COVID-19 (China, Korea, Japan, Thailand, Philippines, and US) within 14 days before symptom onset, OR

• Close contact with a symptomatic traveler who developed fever and acute respiratory illness (not necessarily pneumonia) within 14 days after traveling from countries mentioned above, OR

• A member of a cluster of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) of unknown etiology in which COVID-19 is being evaluated, in consultation with state and local health department, OR

• Fever AND symptoms of respiratory illness (not necessarily pneumonia; e.g., cough, shortness of breath) AND a history of being in a healthcare facility (as a patient, worker or visitor) within 14 days before symptom onset in a country or territory in or near in which recent healthcare-associated cases of COVID-19 have been identified.

• Fever OR symptoms of respiratory illness (not necessarily pneumonia, e.g., cough, shortness of breath) AND close contact with a confirmed MERS case while the case was ill.

3. **SURVEILLANCE AND CASE INVESTIGATION**

Case Investigation

Local and regional health departments should investigate all reports of novel coronavirus including COVID-19. Investigations should include an interview of the case or surrogate to obtain a detailed exposure history. The current investigation form is in Appendix 1. Completion of a more detailed investigation form may be required for probable or confirmed cases or in the event of an outbreak or other special situation. This more detailed investigation form will be provided by ASDOH, if needed.

**Suspect (Patient Under Investigation [PUI]) Case Investigation Checklist**

• Any suspected novel coronavirus case should be investigated immediately.

• Ensure that appropriate control measures have been implemented (see Prevention and Control Measures, below).

• Determine whether the patient meets the case definition.

  ➢ Obtain medical records, interview the suspected case-patient or surrogate and interview the patient’s healthcare provider.

• Notify ASDOH immediately of suspect (PUI) cases of COVID-19.
• Collect and ship specimens Hawaii State Laboratory
  ➢ Inform the testing laboratory by calling Hawaii State Epidemiologist and Hawaii Currier.
  ➢ Note: Only persons who meet case definition or have been approved by the ASDOH Epidemiologist will be tested for COVID-19.

**Confirmed/Probable Case Investigation Checklist**

• Any confirmed or probable novel coronavirus cases should be investigated immediately.

• Ensure that appropriate control measures have been implemented (see Prevention and Control Measures, below).

• Confirm that laboratory results (if available) meet the case definition.

• For confirmed cases, verify that the laboratory that performed the confirmatory testing is a public health laboratory using CDC-approved protocols for a specific novel strain.

• For probable cases, verify that epidemiologic linkages meet the case definition.

• Notify ASDOH Epidemiologist immediately of probable or confirmed cases of COVID-19.

• For probable cases, collect and ship specimens to the CDC laboratory

• Complete the AMS COVID-19 Investigation Form using medical records and by interviewing the case-patient or surrogate to identify close contacts, risk factors, and other pertinent information. Completion of a more detailed investigation form may be required and will be provided by ASDOH, if needed.

• Identify close contacts and determine if secondary cases have occurred.
  ▪ See the Contact Tracing section below.
  ▪ Inform CDC immediately if the case-patient traveled via airplane while symptomatic.

• Be prepared to enhance surveillance in the local area for respiratory illnesses and respiratory viruses, if requested by CDC.

• Refer to the *Public Health Preparedness, Surveillance, and Response Plan for American Samoa* for a list of responsibilities by department and program area, and for action triggers.

• If applicable, complete the steps in the Managing Special Situations section.
  Fax or send by secure email the novel coronavirus-specific PUI Form and other investigation forms (if provided) to CDC EOC. The PUI form must be faxed or securely emailed to CDC within 48 hours of testing.

**Prevention and Control Measures**

Prevention and control guidelines for COVID-19 are subject to change as disease knowledge evolves. Please refer to the CDC websites provided below for the most recent recommendations.
Healthcare Facilities and Healthcare Personnel


**Infection Control Recommendations**

**Minimize Chance for Exposures**

Ensure facility policies and practices are in place to minimize exposures to respiratory pathogens including COVID-19. Measures should be implemented before patient arrival, upon arrival, and throughout the duration of the affected patient’s presence in the healthcare setting.

**Before Arrival**
- When scheduling appointments, instruct patients and persons who accompany them to call ahead or inform LBJ ER upon arrival if they have symptoms of any respiratory infection (e.g., cough, runny nose, fever) and to take appropriate preventive actions (e.g., wear a facemask upon entry to contain cough, follow triage procedure).

**Upon Arrival and During the Visit**
- Take steps to ensure all persons with symptoms of a respiratory infection adhere to respiratory hygiene and cough etiquette, hand hygiene, and triage procedures throughout the duration of the visit. Consider posting visual alerts (e.g., signs, posters) at the entrance and in strategic places (e.g., waiting areas, elevators, cafeterias) to provide patients and Health Care Providers with instructions (in appropriate languages) about hand hygiene, respiratory hygiene, and cough etiquette. Instructions should include how to use facemasks or tissues to cover nose and mouth when coughing or sneezing, to dispose of tissues and contaminated items in waste receptacles, and how and when to perform hand hygiene.

- Provide space and encourage persons with symptoms of respiratory infections to sit as far away from others as possible. If available, facilities may wish to place these patients in a separate area while waiting for care.

- Ensure rapid triage and isolation of patients who might have COVID-19 infection
  - Identify patients at risk for having COVID-19 infection before or immediately upon arrival to the hospital
    - Implement triage procedures to detect patients at risk for having COVID-19 infections during or before patient triage or registration (e.g., at the time of patient check-in) and ensure that all patients are asked about the presence of symptoms of a respiratory infection and history of travel to areas experiencing transmission of COVID-19 or contact with possible COVID-19 patients. See the “Interim Guidance for Healthcare Professionals” ([https://www.cdc.gov/coronavirus/COVID-19/clinical-criteria.html](https://www.cdc.gov/coronavirus/COVID-19/clinical-criteria.html)) for which patients to evaluate for COVID-19.
  - Immediately isolate those identified as at risk for having COVID-19 infection
    - Implement Respiratory Hygiene and Cough Etiquette (i.e., placing a
facemask over the patient's nose and mouth) and isolate those at risk for COVID-19 infection in an Airborne Infection Isolation Room (AIIR). See recommendations for “Patient Placement” below.

- Provide supplies to perform hand hygiene to all patients upon arrival to facility (e.g., at entrances of facility, waiting rooms, at patient check-in) and throughout the entire duration of the visit to the healthcare setting.

**Ensure Adherence to Standard, Contact and Airborne Precautions**

Standard precautions assume that every person is potentially infected or colonized with a pathogen that could be transmitted in the healthcare setting. Elements of standard precautions that apply to patients with respiratory infections, including those caused by COVID-19 are summarized below. Attention should be paid to training and proper donning, doffing and disposal of any personal protective equipment. All aspects of standard precautions (e.g., injection safety) are not emphasized in this document but can be found in the guideline titled Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. All Health Care Providers who enter the room of a patient with suspected or confirmed COVID-19 should adhere to Standard, Contact, and Airborne precautions, including the following:

- Gloves
  - Put on clean, non-sterile gloves upon entry into the patient room or care area. Change gloves if they become torn or heavily contaminated.
  - Remove and discard gloves immediately upon leaving the patient room or care area. Please see section below on “Using More than one Kind of Personal Protective Equipment (PPE)” for recommended sequence of PPE removal.

- Gowns
  - Put on a clean disposable gown upon entry into the patient room or area. Change the gown if it becomes soiled. Remove and discard the gown immediately upon leaving the patient room or care area.

**Hand Hygiene**

- HCP should perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and upon removal of PPE, including gloves. Hand hygiene in healthcare settings can be performed by washing with soap and water or using alcohol-based hand rubs. If hands are visibly soiled, use soap and water, not alcohol-based hand rubs.

- Healthcare facilities should ensure that facilities and supplies for performing hand hygiene are readily available to all personnel.

**Personal Protective Equipment**

Employers should select appropriate PPE and provide it to workers in accordance with OSHA’s PPE standards (29 CFR 1910 Subpart I). Workers must receive training on and demonstrate an understanding of when to use PPE; what PPE is necessary; how to properly don (put on), use, doff (take off) PPE; how to properly dispose of or disinfect and maintain PPE; and the limitations of PPE. Any reusable PPE must be properly cleaned, decontaminated, and maintained after and between uses.
• Respiratory Protection

➤ Use respiratory protection (i.e., a respirator) that is at least as protective as a fit-tested NIOSH-certified disposable N95 filtering facepiece respirator upon entry to the patient room or care area.

➤ The respirator should be the last part of the PPE ensemble to be removed. If reusable respirators are used, they must be cleaned and disinfected according to manufacturer’s reprocessing instructions prior to re-use. If disposable respirators are used, they should be removed and discarded after leaving the patient room or care area and closing the door.

➤ Respirator use must be in the context of a complete respiratory protection program in accordance with Occupational Safety and Health Administration (OSHA) Respiratory Protection standard (29 CFR 1910.134). Staff should be medically cleared and fit-tested if using respirators with tight-fitting facepieces (e.g., a NIOSH-certified disposable N95) and trained in the proper use of respirators, safe removal and disposal, and medical contraindications to respirator use.

• Eye Protection

➤ Put on eye protection (e.g., a disposable face shield) upon entry to the patient room or care area. Remove and discard eye protection immediately upon leaving the patient room or care area. Reusable eye protection (e.g., goggles) must be cleaned and disinfected according to manufacturer’s reprocessing instructions prior to re-use.

• Using More than one Kind of Personal Protective Equipment (PPE)

➤ Different types of PPE are used together to prevent multiple routes of transmission.

➤ The following sequence is a general approach to putting on this PPE combination for respiratory pathogens: first gown; then respirator; then goggles or face shield; then gloves.

➤ The following sequence is a general approach to removing PPE for respiratory pathogens: first gloves; then goggles or face shield; then gown; then respirator.

➤ Except for respirator, remove PPE at doorway or in anteroom. Remove respirator after leaving patient room and closing door.

➤ Careful attention should be given to prevent contamination of clothing and skin during the process of removing PPE.

➤ Perform hand hygiene as described above immediately before putting on and after removing all PPE.
Patient Placement

- Place a patient who might be infected with COVID-19 in an Airborne Infection Isolation Room (AIIR) that has been constructed and maintained in accordance with current guidelines.

  - AIIRs are single patient rooms at negative pressure relative to the surrounding areas, and with a minimum of 6 air changes per hour (12 air changes per hour are recommended for new construction or renovation). Air from these rooms should be exhausted directly to the outside or be filtered through a high-efficiency particulate air (HEPA) filter before recirculation. Room doors should be kept closed except when entering or leaving the room, and entry and exit should be minimized. Facilities should monitor and document the proper negative-pressure function of these rooms.

  - If an AIIR is not available, the patient should be transferred as soon as is feasible to a facility where an AIIR is available. Pending transfer, place a facemask on the patient and isolate him/her in an examination room with the door closed. The patient should not be placed in any room where room exhaust is recirculated without high-efficiency particulate air (HEPA) filtration.

- Once in an AIIR, the patient’s facemask may be removed; the facemask should remain on if the patient is not in an AIIR. Limit transport and movement of the patient outside of the AIIR to medically-essential purposes. When outside of the AIIR, patients should wear a facemask to contain secretions.

- Only essential personnel should enter the AIIR. Implement staffing policies to minimize the number of HCP who enter the room.

  - Facilities should consider caring for these patients with dedicated HCP to minimize risk of transmission and exposure to other patients and other HCP.

- Facilities should keep a log of all persons who care for OR enter the rooms or care area of these patients.

- Once the patient vacates a room, unprotected individuals, including HCP, should not be allowed in that room until sufficient time has elapsed for enough air changes to remove potentially infectious particles. More information on clearance rates under differing ventilation conditions is available here: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5417a1.htm?s_cid=rr5417a1_e%20-%
  20tab1. In addition, the room should undergo appropriate cleaning and surface disinfection before unprotected individuals are allowed to reenter it.
Duration of Infection Control Precautions

- At this time, information is lacking to definitively determine a recommended duration for keeping patients in isolation precautions.

- Duration of precautions should be determined on a case-by-case basis, in conjunction with local, state, and federal health authorities.

- Factors that should be considered include: presence of symptoms related to COVID-19, date symptoms resolved, other conditions that would require specific precautions (e.g., tuberculosis, Clostridium difficile) and available laboratory information.

Manage Visitor Access and Movement Within the Facility

Establish procedures for monitoring, managing and training visitors.

All visitors should follow respiratory hygiene and cough etiquette precautions while in the common areas of the facility.

Restrict visitors from entering the COVID-19 patient’s room. Facilities can consider exceptions based on end-of-life situations or when a visitor is essential for the patient’s emotional well-being and care.

Visitors who have been in contact with the patient before and during hospitalization are a possible source of COVID-19 for other patients, visitors, and staff.

Visitors to COVID-19 patients should be scheduled and controlled to allow for:

- Screening visitors for symptoms of acute respiratory illness before entering the hospital.

- Facilities should evaluate risk to the health of the visitor (e.g., visitor might have underlying illness putting them at higher risk for COVID-19) and ability to comply with precautions.

- Facilities should provide instruction, before visitors enter patients’ rooms, on hand hygiene, limiting surfaces touched, and use of PPE according to current facility policy while in the patient's room.

- Facilities should maintain a record (e.g., log book) of all visitors who enter patient rooms.

- Visitors should not be present during aerosol-generating procedures.

- Visitors should be instructed to limit their movement within the facility.

Exposed visitors (e.g., contact with symptomatic COVID-19 patient prior to admission) should be advised to report any signs and symptoms of acute illness to their health care provider for a period of at least 14 days after the last known exposure to the sick patient.

Implement Engineering Controls

Consider designing and installing engineering controls to reduce or eliminate exposures by shielding HCP and other patients from infected individuals. Examples of engineering controls include physical barriers or partitions to guide patients through triage areas, curtains between
patients in shared areas, closed suctioning systems for airway suctioning for intubated patients, as well as appropriate air-handling systems (with appropriate directionality, filtration, exchange rate, etc.) that are installed and properly maintained.

Monitor and Manage Ill and Exposed Healthcare Personnel

Health Care Providers who care for patients with COVID-19 should be monitored. They should immediately report any signs (e.g., fever) or symptoms (e.g., cough, shortness of breath) of acute illness to their supervisor or a facility designated person (e.g., occupational health services) for a period of 14 days after the last known contact with a COVID-19 patient, regardless of their use of PPE.

Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Patients Under Investigation (PUIs) for 2019 Novel Coronavirus (COVID-19)

- At this time, diagnostic testing for COVID-19 will be conducted at Hawaii State Lab.

- ASDOH will immediately notify Hawaii State Epidemiologist and CDC Regional Officer to report the PUI and determine whether testing for COVID-19 at Hawaii State Lab is indicated.

- Specimen Type and Priority. To increase the likelihood of detecting infection, CDC recommends:
  - Collection of three specimen types: lower respiratory, upper respiratory and serum specimens for testing is recommended.
  - If possible, additional specimen types (e.g., stool, urine) should be collected and should be stored initially until decision is made by CDC whether additional specimen sources should be tested.
  - Specimens should be collected as soon as possible once a PUI is identified regardless of symptom onset. Maintain proper infection control when collecting specimens.

General Guidelines

Store specimens at 2-8°C and ship overnight to CDC on ice pack. Label each specimen container with the patient’s ID number (e.g., medical record number), unique specimen ID (e.g., laboratory requisition number), specimen type (e.g., serum) and the date the sample was collected. Complete a CDC Form 50.34 for each specimen submitted. In the upper left box of the form, 1) for test requested select “Respiratory virus molecular detection (non-influenza) CDC-10401” and 2) for At CDC, bring to the attention of enter “Stephen Lindstrom: COVID-19 PUI”.

Respiratory Specimens

Lower respiratory tract

- Bronchoalveolar lavage, tracheal aspirate.
  - Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container. Refrigerate specimen at 2-8°C and ship overnight to CDC on ice pack.

- Sputum
Have the patient rinse the mouth with water and then expectorate deep cough sputum directly into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container. Refrigerate specimen at 2-8°C and ship overnight to CDC on ice pack.

Upper respiratory tract

- Nasopharyngeal swab AND oropharyngeal swab (NP/OP swab)
  - Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing. Place swabs immediately into sterile tubes containing 2-3 ml of viral transport media. NP and OP specimens should be kept in separate vials. Refrigerate specimen at 2-8°C and ship overnight to CDC on ice pack.

  - Nasopharyngeal swab: Insert a swab into the nostril parallel to the palate. Leave the swab in place for a few seconds to absorb secretions. Swab both nasopharyngeal areas with the same swab.

  - Oropharyngeal swab (e.g., throat swab): Swab the posterior pharynx, avoiding the tongue.

- Nasopharyngeal wash/aspirate or nasal aspirate
  - Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container. Refrigerate specimen at 2-8°C and ship overnight to CDC on ice pack.

Serum

Minimum volume required:

- Children and adults: Collect 1 tube (5-10 mL) of whole blood in a serum separator tube.

- Infant: A minimum of 1 mL of whole blood is needed for testing pediatric patients. If possible, collect 1 mL in a serum separator tube.

Serum separator tubes should be stored upright for at least 30 minutes, and then centrifuged at 1000–1300 relative centrifugal force (RCF) for 10 minutes before removing the serum and placing it in a separate sterile tube for shipping (such as a cryovial). Refrigerate the serum specimen at 2-8°C and ship overnight to CDC on ice-pack.

Shipping

- Specimens PUI’s must be packaged, shipped, and transported according to the current edition of the International Air Transport Association (IATA) Dangerous Goods Regulations external icon.

- Store specimens at 2-8°C and ship overnight to Hawaii State Lab on ice pack. If a specimen is frozen at -70°C ship overnight to Hawaii State Lab on dry ice.
• Additional useful and detailed information on packing, shipping, and transporting specimens can be found at Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens Associated with 2019 Novel Coronavirus (COVID-19).

Recommended Prevention Steps for Confirmed Coronavirus Individuals:

The following prevention steps are recommended for people confirmed to have COVID-19 infection who can receive care at home and do not need to be hospitalized for medical reasons; people being evaluated by a healthcare provider for COVID-19 infection; caregivers and household members of a person confirmed to have, or being evaluated for, COVID-19 infection; and other people who have had close contact with a person confirmed to have, or being evaluated for, COVID-19 infection:

Note: If you are confirmed to have, or being evaluated for, COVID-19 infection you should follow the prevention steps below until a healthcare provider or local or state health department says you can return to your normal activities.

Stay home

• You should restrict activities outside your home, except for getting medical care. Do not go to work, school, or public areas, and do not use public transportation or taxis.

Separate yourself from other people in your home

• As much as possible, you should stay in a different room from other people in your home. Also, you should use a separate bathroom, if available.

Call ahead before visiting your doctor

• Before your medical appointment, call the healthcare provider and tell him or her that you have, or are being evaluated for, COVID-19 infection. This will help the healthcare provider’s office take steps to keep other people from getting infected.

Wear a facemask

• You should wear a facemask when you are in the same room with other people and when you visit a healthcare provider. If you cannot wear a facemask, the people who live with you should wear one while they are in the same room with you.

Cover your coughs and sneezes

• Cover your mouth and nose with a tissue when you cough or sneeze, or you can cough or sneeze into your sleeve. Throw used tissues in a lined trash can, and immediately wash your hands with soap and water.

Wash your hands

• Wash your hands often and thoroughly with soap and water. You can use an alcohol-based hand sanitizer if soap and water are not available and if your hands are not visibly dirty. Avoid touching your eyes, nose, and mouth with unwashed hands.

Avoid sharing household items
• You should not share dishes, drinking glasses, cups, eating utensils, towels, bedding, or other items with other people in your home. After using these items, you should wash them thoroughly with soap and water.

Monitor your symptoms

Seek prompt medical attention if your illness is worsening (e.g., difficulty breathing). Before going to your medical appointment, call the healthcare provider and tell him or her that you have, or are being evaluated for, COVID-19 infection. This will help the healthcare provider’s office take steps to keep other people from getting infected. Ask your healthcare provider to call the local or state health department.

Protocols for Contract Tracing:

For all confirmed and probable cases of novel coronavirus infection, contact tracing for close contacts (see CDC’s close contact definition below) is required. In addition, because COVID-19 and other novel coronaviruses are not fully understood, ASDOH may request that contact tracing activities for confirmed and probable cases include healthcare workers who were wearing recommended PPE but otherwise meet the definition of close contact.

The extent of follow-up required for close contacts of confirmed or probable cases may depend on the number of cases identified, the severity of illness or interest from public health leaders or media. Contract tracing requirements may cease in specific situations (e.g., in the case of an ongoing pandemic), as specified by ASDOH.

Contact tracing

• Contact tracing should be done for all probable and confirmed cases.
• Complete the ASDOH Respiratory Disease Contact Tracking and provide a copy to ASDOH.
• Advise contacts of signs and symptoms of illness, and refer them to their healthcare providers if they experience any symptoms compatible with novel coronavirus infection within 14 days of their last contact with the confirmed or probable case.
  o Advise ill close contacts to call ahead prior to visiting their healthcare provider and inform their healthcare provider about recent contact with a confirmed or probable case.
  o Close contacts with respiratory or other compatible symptoms should be tested for novel coronavirus.
• Close contacts should be actively monitored for symptoms of novel coronavirus infection for a minimum of 14 days after last contact with the confirmed/probable case (i.e., follow-up should be performed at regular intervals).
• Collect serum specimens or other laboratory specimens on asymptomatic close contacts, when requested (See Laboratory Procedures section)
• Provide close contacts with a disease fact sheet, if available.

Close contacts definition for COVID-19:
Close contact is defined as a) being within approximately 6 feet (2 meters), or within the room or care area, of a confirmed COVID-19 case for a prolonged period of time (such as caring for, living with, visiting, or sharing a healthcare waiting area or room with, a confirmed COVID-19 case) while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection); or b) having direct contact with infectious secretions of a confirmed COVID-19 case (e.g., being coughed on) while not wearing recommended personal protective equipment (i.e., gowns, gloves, respirator, eye protection).
Data to inform the definition of close contact are limited; considerations when assessing close contact include the duration of exposure (e.g., longer exposure time likely increases exposure risk) and the clinical symptoms of the person with COVID-19 (e.g., coughing likely increases exposure risk). At this time, transient interactions, such as walking by a person with COVID-19, are not thought to constitute an exposure; however, final determination should be made in consultation with public health authorities.

Protocols to Manage Special Situations:

Clusters of Patients with Severe Acute Respiratory Illness
- Clusters of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) without recognized links to a case of COVID-19 infection or to travelers from countries in or near the Arabian Peninsula should be evaluated for common respiratory pathogens.
- If the illnesses remain unexplained, providers should consider testing for COVID-19, in consultation with state and local health departments.
- In accordance with the World Health Organization’s guidance for COVID-19, a cluster is defined as two or more persons with onset of symptoms within the same 14 days period, and who are associated with a specific setting such as a classroom, workplace, household, extended family, hospital, other residential institution, military barracks or recreational camp.
- If a cluster of patients with severe acute respiratory illness is identified, notify Command Post immediately at (684) 633-5871 or (684) 633-5872.

Multiple Cases/Outbreaks of Novel Coronavirus
If there is more than one case of novel coronavirus in a household, local area or facility, or an outbreak is suspected, notify Command Post immediately at (684) 633-5871 or (684) 633-5872.

The ASDOH EpiNet Teams will:
- Investigate common exposures among the cases and work with any identified facilities or entities.
- Recommend appropriate control measures for the specific entity or setting.
- Perform contact tracing and monitoring for close contacts of confirmed/probable cases.
- Collect specimens from close contacts, if requested.
- Encourage persons with compatible symptoms to be evaluated by a healthcare provider.
- Alert all healthcare providers in the area to be cognizant of possible cases and encourage immediate reporting of suspected cases.
- Collect and ship specimens on all suspected or probable cases to the Hawaii State Lab laboratory or another public health laboratory qualified to perform novel coronavirus testing using CDC-approved protocols for a specific novel strain.
- Enhance respiratory virus surveillance (e.g., case reporting and laboratory testing) in the facility or in a defined geographic area (depending on the specific outbreak situation)
Procedures for ASDOH Laboratory:

Identification of a novel coronavirus such as COVID-19 is available Hawaii State Lab

Specimen Collection
Please see https://www.cdc.gov/coronavirus/COVID-19/guidelines-clinical-specimens.html for the most up-to-date guidelines.

Specimen Type and Priority
To date, little is known about pathogenic potential and transmission dynamics of COVID-19. To increase the likelihood of detecting infection, CDC recommends collecting multiple specimens from different sites at different times after symptom onset, if possible.

Points to consider when determining which specimen types to collect from a patient under investigation for COVID-19 include:

➢ The number of days between specimen collection and symptom onset
➢ Symptoms at the time of specimen collection

Additional points to consider:

➢ Maintain proper infection control when collecting specimens
➢ Use approved collection methods and equipment when collecting specimens
➢ Handle, store, and ship specimens following appropriate protocols

Collection of all three specimen types (not just one or two of the three)—lower respiratory, upper respiratory and serum specimens—for testing using the CDC COVID-19 rRT-PCR assay is recommended. Lower respiratory specimens are preferred, but collecting nasopharyngeal and oropharyngeal (NP/OP) specimens, and serum, is strongly recommended depending upon the length of time between symptom onset and specimen collection. Respiratory specimens should be collected as soon as possible after symptoms begin – ideally within 7 days. However, if more than a week has passed since symptom onset and the patient is still symptomatic, respiratory samples should still be collected, especially lower respiratory specimens since respiratory viruses can still be detected by rRT-PCR. For example,

• If symptom onset for a PUI with respiratory symptoms was less than 14 days ago, a single serum specimen (see Serum section, below), an NP/OP specimen, and a lower respiratory specimen (see Respiratory Specimens section, below) should be collected for CDC MERS rRT-PCR testing at an authorized state or local public health laboratory.

• If symptom onset for a PUI with an ongoing respiratory tract infection (especially a lower respiratory tract infection) was 14 or more days ago, a single serum specimen for serologic testing at CDC (see Serum section, below) in addition to a lower respiratory specimen and an NP/OP specimen (see Respiratory Specimens section, below) are recommended.
**General Guidelines**

For short periods (≤ 72 hours), most specimens should be held at 2-8°C rather than frozen. For delays exceeding 72 hours, freeze specimens at -70°C as soon as possible after collection (with exceptions noted below). Label each specimen container with the patient’s ID number, specimen type and the date the sample was collected.

**Respiratory Specimens**

A. Lower respiratory tract

Bronchoalveolar lavage, tracheal aspirate, or pleural fluid
- Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.
- Refrigerate specimen at 2-8°C if the specimen will arrive at the testing laboratory within 72 hours of collection; if exceeding 72 hours, freeze at -70°C and ship on dry ice.

Sputum
- Have the patient rinse his/her mouth with water and then expectorate (deep cough) sputum directly into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.
- Refrigerate specimen at 2-8°C if the specimen will arrive at the testing laboratory within 72 hours of collection; if exceeding 72 hours, freeze at -70°C and ship on dry ice.

B. Upper respiratory tract

Nasopharyngeal AND oropharyngeal swabs (NP/OP swabs)
- Collection of both nasopharyngeal and oropharyngeal swabs, or a combined NP/OP specimen, is recommended.
- Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing.
- Collection technique
  - Nasopharyngeal swabs: Insert a swab into the nostril parallel to the palate. Leave the swab in place for a few seconds to absorb secretions. Swab both nasopharyngeal areas.
  - Oropharyngeal swabs: Swab the posterior pharynx, avoiding the tongue.
- Place swabs immediately into sterile tubes containing 2-3 ml of viral transport media. NP/OP specimens can be combined, placing both swabs in the same vial.
- Refrigerate specimen at 2-8°C if the specimen will arrive at the testing laboratory within 72 hours of collection; if exceeding 72 hours, freeze at -70°C and ship on dry ice.

Nasopharyngeal wash/aspirate or nasal aspirates
- Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.
- Refrigerate specimen at 2-8°C if the specimen will arrive at the testing laboratory within 72 hours of collection; if exceeding 72 hours, freeze at -70°C and ship on dry ice.
C. Serum

Serum (for serologic testing at CDC) [Note: Use this serum guidance if the only serum specimen available would be collected 14 or more days after illness onset]

- Because we do not want to delay detection of COVID-19 infection and since the prevalence of COVID-19 in the US is low, serologic testing on a single serum sample collected 14 or more days after symptom onset may still be beneficial. This is in contrast to serologic testing for many other respiratory pathogens which require collection and testing of acute and convalescent serum specimens. Serologic testing is currently available at CDC upon request and approval. Please be aware that the COVID-19 serologic test is for research/surveillance purposes and not for diagnostic purposes - it is a tool developed in response to the COVID-19 outbreak. Contact CDC’s Emergency Operations Center (EOC) (770-488-7100) for consultation and approval if serologic testing is being considered.

Serum (for rRT-PCR testing at authorized state or local public health lab) [Note: Use this serum guidance for specimens collected during the first two weeks of the patient’s illness onset]

- For rRT-PCR testing (i.e., detection of the virus and not antibodies), a single serum specimen collected optimally during the first 10-12 days after symptom onset is recommended. Note: The kinetics of COVID-19 are not well understood. Once additional data become available, these recommendations will be updated as needed.
- The minimum amount of serum required for COVID-19 testing (either serologic or rRT-PCR) is 200 μL. If both COVID-19 serology and rRT-PCR tests are planned, the minimum amount of serum required is 400 μL (200 μL for each test). Serum separator tubes should be stored upright for at least 30 minutes, and then centrifuged at 1000–1300 relative centrifugal force (RCF) for 10 minutes before removing the serum and placing it in a separate sterile tube for shipping (such as a cryovial). Refrigerate the serum specimen at 2–8°C and ship on ice-pack; freezing and shipment of serum on dry ice is permissible.
- Children and adults
  ➢ Collect 1 tube (5-10 mL) of whole blood in a serum separator tube.
- Infants
  ➢ A minimum of 1 mL of whole blood is needed for testing pediatric patients.
  ➢ If possible, collect 1 mL in a serum separator tube.

II. Protocols, Advisories and Guidance for Isolation and Treatment:

PURPOSE:
To prevent potential healthcare associated infection (HAI) transmission of COVID-19 to patients, staff or visitor.

Background:
Coronaviruses are common in many different species of animals, including camels and bats. Rarely, these coronaviruses can evolve and infect humans and then spread between humans.
Recent examples of this include Severe Acute Respiratory Syndrome (SARS-CoV) and Middle East Respiratory Syndrome (MERS-CoV).

Most coronaviruses infect animals, but not people. In the future, one or more of these other coronaviruses could potentially evolve and spread to humans, as has happened in the past. We still don’t understand why only certain coronaviruses are able to infect people.

https://www.cdc.gov/coronavirus/index.html (Jan 26, 2020)

2019 Novel Coronavirus (COVID-19) is a virus (more specifically, a coronavirus) identified as the cause of an outbreak of respiratory illness first detected in Wuhan, China. Early on, many of the patients in the outbreak in Wuhan, China reportedly had some link to a large seafood and animal market, suggesting animal-to-person spread. However, a growing number of patients reportedly have not had exposure to animal markets, indicating person-to-person spread is occurring.

At this time, it’s unclear how easily or sustainably this virus is spreading between people. Chinese officials report that sustained person-to-person spread in the community is occurring in China. Person-to-person spread in the United States has not yet been detected, but it’s likely to occur to some extent. Cases in healthcare settings, like hospitals, may also occur.

DEFINITIONS:

Case Definitions for COVID-19

1. Severe acute respiratory infection (SARI) in a person, with history of fever and cough requiring admission to hospital, with no other etiology that fully explains the clinical presentation (clinicians should also be alert to the possibility of atypical presentations in patients who are immunocompromised);

AND any of the following:
   a) A history of travel to Wuhan, Hubei Province China in the 14 days prior to symptom onset; or
   b) the disease occurs in a health care worker who has been working in an environment where patients with severe acute respiratory infections are being cared for, without regard to place of residence or history of travel; or
   c) the person develops an unusual or unexpected clinical course, especially sudden deterioration despite appropriate treatment, without regard to place of residence or history of travel, even if another etiology has been identified that fully explains the clinical presentation.

2. A person with acute respiratory illness of any degree of severity who, within 14 days before onset of illness, had any of the following exposures:
   a) close physical contact² with a confirmed case of 2019 n-CoV infection, while that patient was symptomatic: or
   b) a healthcare facility in a country where hospital-associated 2019 n-CoV infections have been reported.
**Definition of Healthcare Personnel (HCP)** – For the purposes of this guidance, HCP refers to all persons, paid and unpaid, working in healthcare settings engaged in patient care activities, including: patient assessment for triage, entering examination rooms or patient rooms to provide care or clean and disinfect the environment, obtaining clinical specimens, handling soiled medical supplies or equipment, and coming in contact with potentially contaminated environmental surfaces.

**Definition of PATIENT UNDER INVESTIGATION (PUI) for 2019n-CoV:**

Healthcare providers should evaluate patients in the U.S. for MERS-CoV infection if they meet the following criteria, defined as a Patient Under Investigation (PUI). The below criteria serve as guidance for testing; however, patients should be evaluated and discussed with public health departments on a case-by-case basis if their clinical presentation or exposure history is equivocal (e.g., uncertain history of health care exposure).

Table 1

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>And</th>
<th>Epidemiologic Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Severe illness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fever <em>and</em> pneumonia or acute respiratory distress syndrome (based on clinical or radiological evidence)</td>
<td><em>and</em></td>
<td>A history of travel from affected countries within 14 days before symptom onset, <em>or</em> close contact with a symptomatic traveler who developed fever and acute respiratory illness (not necessarily pneumonia) within 14 days after traveling from affected countries. – <em>or</em> – A member of a cluster of patients with severe acute respiratory illness (e.g., fever and pneumonia requiring hospitalization) of unknown etiology.</td>
</tr>
<tr>
<td><strong>Milder illness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fever <em>and</em> symptoms of respiratory illness (not necessarily pneumonia; e.g., cough, shortness of breath)</td>
<td><em>and</em></td>
<td>A history of being in a healthcare facility (as a patient, worker, or visitor) within 14 days before symptom onset in an affected country or territory which recent healthcare-associated cases of 2019n-CoV have been identified.</td>
</tr>
<tr>
<td>Fever <em>or</em> symptoms of respiratory illness (not necessarily pneumonia; e.g., cough, shortness of breath)</td>
<td><em>and</em></td>
<td>Close contact with a confirmed 2019n-CoV case while the case was ill.</td>
</tr>
</tbody>
</table>
**Confirmed Case**
A confirmed case is a person with laboratory confirmation of 2019 n-CoV infection. Confirmatory laboratory testing requires a positive PCR on at least two specific genomic targets or a single positive target with sequencing on a second.

**Probable Case**
A probable case is a PUI with absent or inconclusive laboratory results for 2019 n-CoV infection who is a close contact of a laboratory-confirmed 2019n-CoV case. Examples of laboratory results that may be considered inconclusive include a positive test on a single PCR target, a positive test with an assay that has limited performance data available, or a negative test on an inadequate specimen.

**Table 2. Clinical syndromes associated with COVID-19 infection**

<table>
<thead>
<tr>
<th>Uncomplicated Illness</th>
<th>Patients with uncomplicated upper respiratory tract viral infection, may have non-specific symptoms such as fever, cough, sore throat, nasal congestion, malaise, headache, muscle pain or malaise. The elderly and immunosuppressed may present with atypical symptoms. These patients do not have any signs of dehydration, sepsis or shortness of breath.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild pneumonia</td>
<td>Patient with pneumonia and no signs of severe pneumonia. Child with non-severe pneumonia has cough or difficulty breathing + fast breathing: fast breathing (in breaths/min): &lt;2 months, ≥60; 2–11 months, ≥50; 1–5 years, ≥40 and no signs of severe pneumonia.</td>
</tr>
<tr>
<td>Severe pneumonia</td>
<td>Adolescent or adult: fever or suspected respiratory infection, plus one of respiratory rate &gt;30 breaths/min, severe respiratory distress, or SpO2 &lt;90% on room air (adapted from [1]). Child with cough or difficulty in breathing, plus at least one of the following: central cyanosis or SpO2 &lt;90%; severe respiratory distress (e.g. grunting, very severe chest indrawing); signs of pneumonia with a general danger sign: inability to breastfeed or drink, lethargy or unconsciousness, or convulsions. Other signs of pneumonia may be present: chest indrawing, fast breathing (in breaths/min): &lt;2 months, ≥60; 2–11 months, ≥50; 1–5 years, ≥40.2 The diagnosis is clinical; chest imaging can exclude complications.</td>
</tr>
</tbody>
</table>
| Acute Respiratory Distress Syndrome | **Onset:** new or worsening respiratory symptoms within one week of known clinical insult.  

**Chest imaging (radiograph, CT scan, or lung ultrasound):** bilateral opacities, not fully explained by effusions, lobar or lung collapse, or nodules.  
Origin of oedema: respiratory failure not fully explained by cardiac failure or fluid overload. Need objective assessment (e.g. |
### Sepsis

**Echocardiography** to exclude hydrostatic cause of oedema if no risk factor present.

**Oxygenation (adults):**
- Mild ARDS: 200 mmHg < PaO2/FiO2 ≤ 300 mmHg (with PEEP or CPAP ≥5 cmH2O, 7 or non-ventilated)
- Moderate ARDS: 100 mmHg < PaO2/FiO2 ≤ 200 mmHg with PEEP ≥5 cmH2O, 7 or non-ventilated
- Severe ARDS: PaO2/FiO2 ≤ 100 mmHg with PEEP ≥5 cmH2O, 7 or non-ventilated
- When PaO2 is not available, SpO2/FiO2 ≤ 315 suggests ARDS (including in non-ventilated patients)

**Oxygenation (children; note OI = Oxygenation Index and OSI = Oxygenation Index using SpO2):**
- Bilevel NIV or CPAP ≥5 cmH2O via full face mask: PaO2/FiO2 ≤ 300 mmHg or SpO2/FiO2 ≤ 264
- Mild ARDS (invasively ventilated): 4 ≤ OI < 8 or 5 ≤ OSI < 7.5
- Moderate ARDS (invasively ventilated): 8 ≤ OI < 16 or 7.5 ≤ OSI < 12.3
- Severe ARDS (invasively ventilated): OI ≥ 16 or OSI ≥ 12.3

**Sepsis**

Adults: life-threatening organ dysfunction caused by a dysregulated host response to suspected or proven infection, with organ dysfunction*. Signs of organ dysfunction include: altered mental status, difficult or fast breathing, low oxygen saturation, reduced urine output, fast heart rate, weak pulse, cold extremities or low blood pressure, skin mottling, or laboratory evidence of coagulopathy, thrombocytopenia, acidosis, high lactate or hyperbilirubinemia.

Children: suspected or proven infection and ≥2 SIRS criteria, of which one must be abnormal temperature or white blood cell count.

**Septic shock**

Adults: persisting hypotension despite volume resuscitation, requiring vasopressors to maintain MAP ≥65 mmHg and serum lactate level >2 mmol/L.

Children (based on [12]): any hypotension (SBP <5th centile or >2 SD below normal for age) or 2-3 of the following: altered mental state; tachycardia or bradycardia (HR <90 bpm or >160 bpm in infants and HR <70 bpm or >150 bpm in children); prolonged capillary refill (>2 sec) or warm vasodilation with bounding pulses; tachypnea; mottled skin or petechial or purpuric rash; increased lactate; oliguria; hyperthermia or hypothermia.
TRANSMISSIONS-BASED PRECAUTIONS (ISOLATION PRECAUTIONS)

PURPOSE
Transmission-Based Precautions are to be used in addition to Standard Precautions for patients with documented or suspected infection or colonization with highly transmissible or epidemiologically important pathogens for which additional precautions are needed to prevent transmission.

DEFINITIONS
- The term Airborne Precautions has been supplemented with the term Airborne Infection Isolation Room (AIIR) for consistency with the Guidelines for Environmental Infection Control in Healthcare Facilities, the Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings 2005 and the Facility Guidelines Institute Guidelines for Design and Construction of Hospitals.
- Respirator protection protects staff from hazardous or infectious aerosols, such as Mycobacterium tuberculosis. These devices have a sub-micron filter capable of excluding particles that are less than five (5) microns in diameter. Prior to using a respirator, staff must be fit tested for the appropriate size and fit and be in-service on the correct use of the respirator. Staff are responsible for fit checking the respirator before each use. Commonly used respirators in the healthcare setting are:
  - N95 Particulate Respirator
  - N99 Particulate Respirator
  - N100 Particulate Respirator
- Transmission-Based Precautions shall be used in addition to Standard Precautions to prevent the spread of infection throughout the hospital.
- Transmission-Based Precautions include:
  - Contact Precautions
  - Droplet Precautions
  - Airborne Precautions/Airborne Infection Isolation Room (AIIR)

CONTACT PRECAUTIONS
- Contact Precautions shall be used for patients with known or suspected infections or evidence of syndromes that represent an increased risk for contact transmission. See also CDC pathogen-specific recommendations.
- Discontinue Contact Precautions after signs and symptoms of the infection have resolved or according to CDC pathogen-specific recommendations.
  - Patient Placement:
    - Patients who require Contact Precautions shall be placed in a single-patient room when available.
    - When single-patient rooms are in short supply, apply the following principles for making decisions on patient placement shall be used:
      - Patients with conditions that may facilitate transmission (i.e., uncontained drainage, stool incontinence) shall be prioritized for single-patient room placement.
      - Patients who are infected or colonized with the same pathogen and are suitable roommates shall be placed together (cohorted).
If it becomes necessary to place a patient who requires Contact Precautions in a room with a patient who is not infected or colonized with the same infectious agent, the following principles shall be followed:

- Avoid placing patients on Contact Precautions in the same room with patients who have conditions that may increase the risk of adverse outcome from infection or that may facilitate transmission (i.e., those who are immunocompromised, have open wounds, or have anticipated prolonged lengths of stay).
- Ensure that patients are physically separated (i.e., greater than three [3] feet apart) from each other. Draw the privacy curtain between beds to minimize opportunities for direct contact.
- Change protective attire and perform hand hygiene between contact with patients in the same room, regardless of whether one or both patients are on Contact Precautions.

- Personal Protective Equipment:
  - Gloves shall be worn whenever touching the patient’s intact skin or surfaces and articles in close proximity to the patient (i.e., medical equipment, bed rails). Gloves shall be donned upon entry into the patient’s room or cubicle.
  - Gowns shall be worn whenever it is anticipated that clothing will have direct contact with the patient, or potentially contaminated environmental surfaces or equipment in close proximity to the patient. Gown shall be donned upon entry into the room or cubicle. Gown shall be removed, and hand hygiene performed before leaving the patient-care environment.
  - Note: After gown removal, ensure that clothing and skin do not contact potentially contaminated environmental surfaces that could result in possible transfer of microorganism to other patients or environmental surfaces.

- Patient Transport:
  - Patient transport shall be limited to the movement of patients outside of the room for medically necessary purposes.
  - When transport or movement is necessary, the infected or colonized areas of the patient’s body shall be contained and covered.
  - Any contaminated PPE shall be removed and disposed, and hand hygiene shall be performed prior to transporting patients on Contact Precautions.
  - Clean PPE shall be donned to handle the patient at the transport destination.

- Patient-Care Equipment and Instruments/Devices:
  - Handle patient-care equipment and instruments/devices according to Standard Precautions.
  - Disposable non-critical patient-care equipment (i.e., blood pressure cuffs) or patient-dedicated equipment shall be used whenever possible for patients on Contact Precautions. If common use of equipment for multiple patients is unavoidable, equipment shall be cleaned and disinfected prior to use on another patient.

- Environmental Measures:
  - Rooms for patients on Contact Precautions shall be prioritized for frequent cleaning and disinfection (i.e., at least daily), with a focus on frequently-touched surfaces (i.e., bed rails, overbed table, bedside commode, lavatory
surfaces in patient bathrooms, doorknobs) and equipment in the immediate vicinity of the patient.

**DROPLET PRECAUTIONS**

- Droplet Precautions shall be used in accordance with CDC Recommendations for patients known or suspected to be infected with pathogens transmitted by respiratory droplets (i.e., large-particle droplets greater than 5μ in size) that are generated by a patient who is coughing, sneezing or talking.
- Droplet Precautions shall be discontinued after signs and symptoms have resolved or according to CDC pathogen-specific recommendations.

**Patient Placement:**
- Patients who require Droplet Precautions shall be placed in a single-patient room when available.
- When single-patient rooms are in short supply, the following principles for making decisions on patient placement shall be used:
  - **a.** Prioritize patients who have excessive cough and sputum production for single-patient room placement
  - **b.** Place together in the same room (cohort) patients who are infected with the same pathogen and are suitable roommates
  - **c.** If it becomes necessary to place patients who require Droplet Precautions in a room with a patient who does not have the same infection:
    - Avoid placing patients on Droplet Precautions in the same room with patients who have conditions that may increase the risk of adverse outcome from infection or that may facilitate transmission (i.e., those who are immunocompromised, have or have anticipated prolonged lengths of stay).
    - Ensure that patients are physically separated (i.e., greater than three [3] feet apart) from each other. Draw the privacy curtain between beds to minimize opportunities for close contact.
    - Change protective attire and perform hand hygiene between contact with patients in the same room, regardless of whether one patient or both patients are on Droplet Precautions.

**Personal Protective Equipment:**
- A face mask shall be donned upon entry into the patient room or cubicle.
- For patients with suspected or proven SARS, avian influenza or pandemic influenza, refer to the CDC website for the most current recommendations.

**Patient Transport:**
- Patient transport shall be limited to transport and movement of patients outside of the room for medically necessary purposes only.
- If transport or movement in any healthcare setting is necessary, the patient shall be instructed to wear a face mask and follow Respiratory Hygiene/Cough Etiquette.
- **Note:** No mask is required for persons transporting patients on Droplet Precautions.
AIRBORNE PRECAUTIONS

- Airborne Precautions shall be used in accordance with CDC recommendations for patients known or suspected to be infected with infectious agents transmitted person-to-person by the airborne route (i.e., *M. tuberculosis*, measles, chickenpox, disseminated herpes zoster).
- Airborne Precautions shall be discontinued according to CDC pathogen-specific recommendations.

Patient Placement:

- In the event of an outbreak or exposure involving large numbers of patients who require Airborne Precautions, the following should be considered:
  - The Infection Preventionist shall be consulted at 633-1222 Ext. 369 before patient placement to determine the safety of alternative room that do not meet engineering requirements for an AIIR.
  - Cohort patients who are presumed to have the same infection (based on clinical presentation and diagnosis when known) in areas of the facility that are away from other patients, especially patients who are at increased risk for infection (i.e., immunocompromised patients).
  - Use temporary portable solutions (i.e., exhaust fan) to create a negative pressure environment in the converted area of the facility. Air shall be directly discharged to the outside, away from people and air intakes, or direct all the air through HEPA filters before it is introduced to other air spaces.

Staff Restrictions:

- Susceptible healthcare staff shall be restricted from entering the rooms of patients known or suspected to have measles (rubeola), varicella (chickenpox), disseminated zoster or smallpox, if other immune healthcare staff are available.

Use of PPE:

- A fit-tested NIOSH-approved N95 or higher-level respirator shall be worn for respiratory protection when entering the room of a patient when the following diseases are suspected or confirmed:
  - Infectious pulmonary or laryngeal tuberculosis, or when infectious tuberculosis skin lesions are present, and procedures that would aerosolize viable organisms (i.e., irrigation, incision and drainage, whirlpool treatments) are performed
  - Smallpox (vaccinated and unvaccinated)
  - Respiratory protection is recommended for all healthcare staff, including those with a documented “take” after smallpox vaccination, due to the risk of a genetically engineered virus against which the vaccine may not provide protection, or of exposure to a very large viral load (i.e., from high-risk aerosol-generating procedures, immunocompromised patients, hemorrhagic or flat smallpox.

Patient Transport:

- Patients on Airborne Precautions shall only be transported for medically necessary purposes only.
- When transport or movement outside an AIIR is necessary, patients shall be instructed to wear a surgical mask, if possible, and observe Respiratory Hygiene/Cough Etiquette.
• For patients with skin lesions associated with varicella or smallpox, or draining skin lesions caused by *M. tuberculosis*, the affected area shall be covered to prevent aerosolization or contact with the infectious agent in skin lesions.

• **Note:** Healthcare staff transporting patients who are on Airborne Precautions do not need to wear a mask or respirator during transport if the patient is wearing a mask and infectious skin lesions are covered.

**Exposure Management:**

• Susceptible persons shall be offered immunization or provided with the appropriate immune globulin as soon as possible following unprotected contact (i.e., exposed) to a patient with measles, varicella or smallpox.

• Administration of measles vaccine (at any interval following exposure) or immune globulin (within six [6] days of exposure, particularly contacts less than or equal to six [6] months of age, pregnant women, and immunocompromised people, for whom the risk of complications is highest) to susceptible contacts.

• Varicella vaccine should be administered to exposed susceptible persons within 120 hours after the exposure, or administer varicella immune globulin (VZIG or alternative product), when available, within 96 hours for high-risk persons in whom vaccine is contraindicated (i.e., immunocompromised patients, pregnant women, newborns whose mother’s varicella onset was less than five [5] days before or within 48 hours after delivery).

• Smallpox vaccine should be administered to exposed susceptible persons within four (4) days after exposure.

**PATIENT MOVEMENT IN ISOLATION AREA**

• Patient movement and transport outside the isolation area shall be limited to medically necessary purposes.

• Dedicated portable x-ray equipment shall be available in areas designated for cohorting influenza patients.

• If transport or movement is necessary, ensure that the patient wears a surgical or procedure mask.
  • If a mask cannot be tolerated (i.e., due to the patient’s age or deteriorating respiratory status), apply the most practical measures to contain respiratory secretions.

• Patients should perform hand hygiene before leaving the room.

• Alternate routes for persons with possible influenza infection and those who have no symptoms of influenza shall be considered in areas where patient transport is common.

• If there is patient contact with surfaces, these surfaces shall be cleaned and disinfected.

**CONTROL MEASURES IN OUTPATIENT CLINICS**

Patients with nonemergency symptoms of an influenza-like illness may seek care from their medical provider. Implementation of infection prevention and control measures when these patients present for care will help prevent exposure among other patients and clinical and non-clinical office staff.

Outpatient Clinics:
Staff shall post visual alerts (in appropriate languages) at the entrance to outpatient offices instructing persons with respiratory symptoms (i.e., patients, persons who accompany them) to:

- Inform reception and staff when they first register for care
- Practice respiratory hygiene/cough etiquette
- Triage patients calling for medical appointments for influenza symptoms:
  - Discourage unnecessary visits to medical facilities
  - Instruct symptomatic patients on infection prevention and control measures to limit transmission in the home and when traveling to necessary medical appointments
  - Symptomatic patients shall be referred to Medical Triage Tent/ER and appointment rescheduled soon as possible to limit their time in common waiting areas.

Staff shall post signs that promote cough etiquette in common areas (i.e. waiting areas, cafeterias, lavatories) where they can serve as reminders to all persons in the healthcare facility.

Signs shall instruct persons to:

- Cover the nose/mouth with tissue or arm when coughing or sneezing
- Dispose of tissues in the nearest waste receptacle after use
- Perform hand hygiene after contact with respiratory secretions

Outpatient offices shall facilitate adherence to respiratory hygiene/cough etiquette and ensure the availability of materials in waiting areas for patients and visitors.

- Provide tissues and no-touch receptacles (i.e., waste containers with pedal-operated lid or uncovered waste container) for used tissue disposal
- Provide conveniently located dispensers of alcohol-based hand rub
- Provide soap and disposable towels for hand washing where sinks are available
- Promote the use of procedure or surgical masks and spatial separation by persons with symptoms of influenza
- Offer and encourage the use of either procedure masks (i.e., with ear loops) or surgical masks (i.e., with ties or elastic) by symptomatic persons to limit dispersal of respiratory droplets.
- Encourage coughing persons to sit at least three (3) feet away from other persons in common waiting areas.
- If possible, screen patients for influenza-like illness by phone or before coming into the facility and rescheduling appointments for those whose care is nonemergency

Canceling all nonemergency services when there is pandemic influenza in the community.
EMERGENCY MEDICAL SERVICES INFECTIOUS TRANSPORT

Call Taking
- Appropriate information from the caller and dispatcher; appropriate protocols for response, clinical care, application of administrative and environmental controls and use of personal protective equipment (PPE) by responding EMS personnel; and transport to the hospital can provide effective evaluation and treatment of the suspected condition.
- Screening for suspected highly infectious pathogens often involves questioning patients about recent travel to endemic areas and presenting signs and symptoms.
- Travel history and/or direct exposure to potential case within the number of days of the incubation period for the illness of interest.
- Specific signs and symptoms of illness
- Consult with Department of Health Epidemiologist and LBJTMC Infection Preventionist to identify required modifications to processes and protocols to ensure consistency with CDC guidance.

Response
- Regardless of dispatch information, EMS personnel should be vigilant for travel history and signs and symptoms of communicable disease (e.g., fever, cough, shortness of breath) and use standard precautions and add appropriate transmission-based infection control precautions whenever history or exam findings warrant.
- Implement strict standard and transmission-based precautions based on the patient’s clinical information to avoid exposure to potentially infectious bodily fluids, droplets, and airborne particles.
- Identify patients who may be infected with a serious communicable disease by verbal screening and symptoms and recognize the potential hazards.
- Avoid direct contact with a patient who may have a serious communicable disease until you are wearing appropriate PPE.
  - Maintaining a distance of at least six feet may provide protection from transmission of many diseases.
  - Understand and practice with PPE so that you can rapidly and safely don and carefully doff the equipment without cross-contamination.
- Patients or their caregivers may find responders wearing high levels of PPE. Communicating with and calming anxious patients may be more challenging due to PPE as well. Responders should be mindful of this and be prepared to reassure patients and to address their distress and fear.
- Limit the number of EMS providers making contact with a potentially infectious patient to the minimum required to perform tasks safely.
- Hand hygiene (e.g., handwashing with non-antimicrobial soap and water, alcohol-based hand rub, or antiseptic hand wash) is one of the best ways to remove germs, avoid getting sick, and prevent the spread of germs to others.
- Place a surgical mask on a patient with likely infectious cough to significantly limit droplet generation.
  - Patients should cover their nose and mouth when coughing or sneezing; use tissues to contain respiratory secretions and, after use, dispose them in the nearest waste receptacle; and perform hand hygiene after having contact with respiratory
secretions and contaminated objects or materials.
- Apply PPE appropriate for the patient’s condition prior to making direct patient contact.
- Patients with respiratory illnesses
  - Interview conducted at least 6 feet away from the patient may provide some protection from infectious droplets.
  - Ask any patient with respiratory symptoms to wear a surgical mask if they can tolerate it.
- Keep nonessential equipment away from the patient, so as minimize contamination on the scene and in the ambulance.
- Infection control practices can evolve with novel agents or during infectious disease outbreaks or epidemics.

**Personal Protective Equipment**
- Disposable exam gloves – standard gloves for standard precautions
- Disposable exam gloves – with elongated cuffs for use with barrier gowns/suits
- Cleanable goggles OR face shield
- Surgical masks for patients and providers
- Disposable fluid-resistant gown OR disposable fluid-resistant coverall
- Disposable National Institute for Occupational Safety and Health (NIOSH)-approved, fit-tested N95 or equivalent/higher level respirator (e.g., reusable half-face elastomeric respirator N95 or higher rating mask or PAPR with full hood and HEPA filter)
- Disposable boot/shoe covers
- Full face shield (plus consider head cover)
- Boots (disposable or reusable)
- Fluid-resistant coverall – if service uses gowns for other contact exposures
- Disposable, impermeable apron in addition to fluid-resistant coverall for unstable patients

**EMERGENCY MEDICAL SERVICES SANITIZING VEHICLES**

During an influenza pandemic, LBJTMC shall ensure that all emergency transport vehicles shall be cleaned and maintained in accordance with Centers for Disease Control and Prevention’s (CDC) guidelines.

**Procedure:**
- LBJTMC shall coordinate with the CDC’s Health Alert Network, Public Health Information Network (PHIN) and/or Public Health Information Rapid Exchange (PHIRE), and local agencies to ensure the organization has the most recent information on the pandemic situation, and rapidly and properly disseminates up-to-date clinical standards, treatment protocols and just-in-time training to the EMS coordinator.
- Any interim CDC guidance related to a pandemic shall be incorporated into the organization’s infection prevention and control plan which, at a minimum, shall include the consistent practice of basic infection prevention and control procedures, including:
• Vehicle/equipment decontamination
• Hand hygiene
• Cough and respiratory hygiene
• Proper use of Food and Drug Administration (FDA)-regulated medical personal protective equipment (PPE) regardless of the likelihood of an influenza pandemic

• Routine cleaning methods for emergency transport vehicles shall be employed throughout each vehicle with special attention to the following:
  • Clean and disinfect non-patient care areas of the vehicle according to the vehicle manufacturer’s recommendations.
  • Non-patient care areas of the vehicle, such as the driver’s compartment, may become indirectly contaminated, such as by touching the steering wheel with a contaminated glove. Staff shall be particularly vigilant to avoid contaminating environmental surfaces that are not directly related to patient care (i.e., steering wheels, light switches).
  • Nonsterile, disposable gloves that are recommended by the manufacturer of the detergent/disinf ectant shall be worn while cleaning the patient care compartment and when handling cleaning and disinfecting solutions.
  • Gloves shall be disposed of in a sturdy leak proof (i.e., plastic) bag that is tied shut and not reopened if gloves become damaged or soiled or when cleaning is completed.
  • Frequently touched surfaces in patient care compartments (including stretchers, railings, medical equipment control panels, adjacent flooring, walls, ceilings and work surfaces, door handles, radios, keyboards and cell phones) that become directly contaminated with respiratory secretions and other bodily fluids during patient care, or indirectly by touching the surfaces with gloved hands, shall be cleaned first with detergent and water, and then disinfected using an EPA-registered hospital disinfectant in accordance with the manufacturer’s instructions.
    • All safety precautions or other recommendations issued by the manufacturer shall be followed (i.e., allowing adequate ventilation in confined areas, proper disposal of unused product or used containers).
  • Non-porous surfaces in patient care compartments that are not frequently touched shall be cleaned with detergent and water. Large-surface cleaning methods that produce mists or aerosols or disperse dust in patient care areas (i.e., use wet dusting techniques, wipe application of cleaning and/or disinfectant solutions) shall be avoided.
  • Any small spills of bodily fluids (i.e., vomit from an ill patient) shall be cleaned first with detergent and water, followed by disinfection using an EPA-registered hospital disinfectant from EPA List D or E in accordance with the manufacturer’s use instructions and safety precautions.
  • Large spills of bodily fluids (i.e., vomit) shall be managed by removing visible organic matter with absorbent material (i.e., disposable paper towels discarded into a leak-
proof properly labeled container). The spill shall then be cleaned and disinfected as above.

- Contaminated reusable patient care devices and equipment shall be placed in biohazard bags clearly marked for cleaning and disinfection or sterilization as appropriate.
- Reusable devices and equipment shall be clean and disinfected or sterilized according to the manufacturer’s recommendations.
- After cleaning, remove and dispose of gloves as instructed in a leak-proof bag or waste container.
- Immediately clean hands with soap and water or an alcohol-based hand gel. Avoid touching the face with gloved or unwashed hands.¹

III. Travel Advisories and Guidance:

Information for Travelers

General prevention measures for all travelers:

- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand sanitizer.
- Avoid touching your eyes, nose, and mouth. Germs spread this way.
- Avoid close contact with sick people.
- Be sure you are up to date with all of your shots, and if possible, see your health care provider at least 4–6 weeks before travel to get any additional shots.
- Visit CDC’s Travelers’ Health website (http://wwwnc.cdc.gov/travel/) for more information on healthy travel.
- CDC does not recommend that travelers change their plans because of COVID-19. Most instances of person-to-person spread have occurred in health care workers and other close contacts (such as family members and caregivers) of people sick with COVID-19. If you are concerned about COVID-19, you should discuss your travel plans with your doctor.

Travelers who are ill:

- Cover your mouth with a tissue when you cough or sneeze, and throw the tissue in the trash.

• Avoid contact with other people to keep from infecting them. This might mean delaying your travel until you are well.

• Call a doctor if you develop a fever and symptoms of lower respiratory illness, such as cough or shortness of breath, within 14 days after traveling from countries with known COVID-19 transmission. Call the doctor about your recent travel before you go in for an appointment.

• Tell people who have been in close contact with you to monitor their health for 14 days after the last time they were around you.

  ➢ They should call a doctor and tell them about your illness and travel history and their current symptoms.

• If you get sick while you are traveling, see “Getting Health Care Abroad” (http://wwwnce.cdc.gov/travel/page/getting-health-care-abroad) for information about how to locate medical services overseas.

IV. Advisory and Guidance for Schools and Daycare Centers

School/Daycare Exclusion Criteria

Policy:

Children with a fever from any infectious disease cause should be excluded from school and daycare for at least 24 hours after fever subsides without the use of fever-suppressing medications. It is recommended that adults not return to work for at least 24 hours after fever has subsided without the use of fever suppressing medications. Do not exclude close contacts from daily activities such as work or school as long as they have no other reasons for exclusion. In the event of a pandemic the exclusion period may be extended.

DHSS GENERAL ADVISORY TO ALL CLIENTS:

The Department of Human and Social Services (DHSS) continues to take a proactive stance in prevention and containment of the current public health emergency: Coronavirus Disease 2019 (COVID-19). The following General Advisory are measures to protect the health and welfare of our clients, community members-at-large, as well as our workforce.

1. Department-Wide

Anyone who presents with fever, cough, shortness of breath will not be allowed to access DHSS buildings/ Programs. There will be a checkpoint outside of all DHSS offices where you will be asked the following:

a. Do you have a cough? fever? trouble breathing?
   b. Have you traveled within the last 14-days?
      i. If yes, where? (Interviewer will have access to a list of affected U.S. states and foreign countries.)
ii. If yes, are you under self-quarantine?

iii. You will not be allowed access if you answer "yes" to any of these questions.

c. All DHSS clients with underlying medical conditions (ex: heart and kidney disease), acute respiratory illness (ex: lung disease), weak or compromised immune systems, especially those 60 years and older, are required to designate an authorized representative who is in good health to access services/ retrieve benefits on their behalf. (Please see BHS and CFS in part 2 below for exceptions.)

d. DHSS clients are encouraged to first call to make an appointment and get the most current information about accessing our facilities.

1. Specific to Divisions/ Programs

A. ASNAP: All ASNAP recipients with underlying medical conditions (ex: heart and kidney disease), acute respiratory illness (ex: lung disease), weak or compromised immune systems, especially those 60 years and older, are required to designate an authorized representative who is in good health to access services/ retrieve benefits on the recipient's behalf.

B. ASDRFA

i. We will only serve current clients and applicants who have been called to come into our office.

ii. Individuals with pending applications are asked not to come in but call these numbers for an update on the status of your application: 633-7506, 633-1156, 633-1571.

C. ASWIC

i. All proxies, including those 60 years and older, with underlying medical conditions (ex: heart and kidney disease), acute respiratory illness (ex: lung disease), weak or compromised immune systems are required to designate an alternate who is in good health to access services/ retrieve benefits on the recipient’s behalf.

ii. All satellite clinic staff will clean and sanitize frequently touched objects and surfaces (ex: doorknobs, toys, tables, counters, pin and signature pads, keyboards, telephones, personal cell phones, etc.) at least three times daily.

D. Behavioral Health Services (BHS) Individuals who present with fever, cough, shortness of breath will not be served, but are encouraged to call or e-mail us for alternative service options.
E. Children and Family Services (CFS)
   i. Unless it is an emergency, individuals who present with fever, cough, shortness of breath will not be served, but are encouraged to call or e-mail us for alternative service options.
   ii. All shelter facilities staff will clean and sanitize frequently touched objects and surfaces (ex: doorknobs, toys, tables, counters, keyboards, telephones, personal cell phones, etc.) at least three times daily.

F. Child Care
   i. Providers are required to deny services for children presenting with fever, cough, shortness of breath.
   ii. Parents must keep sick children at home.
   iii. A child who develops symptoms any time during the day will be quarantined with required supervision and parents will be contacted for immediate pick-up.
   iv. Daycare employees will not be allowed to work if presenting with fever, cough, shortness of breath.
   v. All daycare centers are required to clean and sanitize frequently touched objects and surfaces (ex: door knobs, toys, tables, counters, biometric scanners and keyboards, telephones, personal cell phones, etc.) at least three times daily.

2. Specific to Employees
   i. Promote and practice proper handwashing frequently. If soap and water is not immediately available, hand sanitizer with at least 60% alcohol will be used.
   ii. Avoid close contact with people who are sick (at least 6 feet is recommended).
   iii. Avoid touching your eyes, nose, and mouth.
   iv. Practice respiratory etiquette.
      1. Cover your mouth and nose with a tissue when you cough, or sneeze then put the used tissue in a waste basket with a lid.
      2. If you don’t have a tissue, cough or sneeze into your upper sleeve, not your hands.
   v. Encourage workers to stay home if they are sick.
   vi. At least three times a day, DHSS employees will clean and sanitize frequently touched objects and surfaces (doorknobs, desks, counters, electronic signature pads, telephones, keyboards, personal cell phones, etc.), especially in waiting areas and child-friendly areas with toys.
   vii. Employees will occupy/ use space and equipment designated for them (desks, computers, telephones, etc.).
   viii. Personal protective equipment will be used if services are required in emergency situations.
   ix. All DHSS community outreach activities are cancelled until further notice.
V. HUMAN RESOURCES EMPLOYMENT ADVISORIES AND GUIDANCE

This memorandum and outlined protocols provide additional guidance for the American Samoa Government Workforce on how to respond to the impacts of Coronavirus Disease 2019 (COVID-19).

The Department of Health continues to remind the general public that immediate health risk from COVID-19 is considered low. However, it remains critically important that we continue to strengthen our efforts to protect the health and welfare of our employees by ensuring the continuity of operations or Territorial Emergency Response Plan (TEOP) are updated to minimize any disruption in services to the people of American Samoa. In general, it is important to make sure your employees have a clear understanding of their work priorities, a responsibility that Agency Heads and managers can take ownership. Set clear expectations on establishing work hours and task prioritization. Empower team leaders to create management by objectives and deliverables for employees to ensure projects are progressing at no expense to quality production.

Flex accommodation will be unique from one organization to another, but organizations must create policies that are effective to their teams. Therefore, the Department of Human Resources (DHR) is providing the following guidance on COVID-19 to supplement public awareness campaign and brochures currently in mass distribution by the Department of Public Health.

This information may also be accessed on our agency website at www.americansamoa.gov

The protocols highlighted on this memorandum reflect the various inquiries DHR has received from agencies and employees regarding COVID-19 and human resources policies. The topics discussed include:

- Call-In Procedures;
- Annual Leave;
- Sick Leave;
- Flex-Scheduling;

Agencies are strongly encouraged to review and update their employees (call-sheet) and emergency contact information, as needed.

Relative to our educational awareness campaign and prevention measures, the DHR strongly encourages Directors and Agency Heads to enforce these added caveats as per ASAC §4.505(2), which states that, “Each department is responsible for administering the annual leave system for their employees and must issue instructions concerning the granting of annual and sick leave.”

If an employee with suspected symptoms of COVID-19 as published by the Department of Health’s Response Manual should adhere to the following guidance:
**Call-In Procedures: (Annual & Sick Leave/Absence Notification)**

An employee must notify your supervisor or the Office of the Director for each sick time or absence from work before the start of the business day at 7:30 a.m. The notification must be received at least fifteen (15) minutes before the start of work with a grace period of fifteen (15) minutes past 7:30 a.m. to be considered **proper notification**.

When providing notification of being sick, an employee must state the reason why they will be absent, whether it is COVID-19 related or instructed by a medical provider to be self-quarantined. While the granting of leave is permitted given all subsections of ASAC §4.0506 are met, it is mandatory that the employee furnish documentary evidence in the form of a medical certificate for periods in excess of 3 consecutive days. However, management may require that the employee furnish such certificate for sick leave involving “any” length of time.

If all sick leave is exhausted, the Agency may charge towards Annual or Compensatory Time.

**Flex-Scheduling:**

The Department of Human Resources is committed to helping and assist employees with work flexibilities given our prevention efforts to combat COVID-19. Flex-Scheduling for employees will be reviewed on a case-by-case basis in situations where self-quarantine or as a caretaker for qualified family members who are classified as suspected, probable, or confirmed with COVID-19 may be granted Flex-Scheduling to accommodate and accomplish both work and personal goals to provide increased productivity at no expense to quality output.

Flexible work arrangements are not appropriate for all employees or positions. The following conditions are also considered for flex-scheduling to be approved: The employee must have a satisfactory history of attendance, meet all performance expectations of his or her current position, and consistently demonstrated the ability to complete tasks and assignments on a timely basis. The nature of the employee’s work and responsibilities must be conducive to a flexible work arrangement without causing significant disruption to performance and/or service delivery.

All flex-scheduling and potential work arrangements must be approved with concurrence of the Department of Human Resources prior to announcement or implementation.

For additional information or support, please contact our office at 633-4485. Thank you.

**Frequently Asked Questions (FAQ):**

1. **Generally, how should agencies manage incidences of quarantinable communicable disease, such as COVID-19?**

   a. The constitution of Flex Scheduling for qualified employees promotes “social distancing” and an alternative to sick and annual leave for exposure to quarantinable communicable disease for an employee who is asymptomatic or caring for a qualified immediate family member who is asymptomatic. Agencies
should have mechanisms in place to monitor and track flexible work arrangements in the event of emergency situations.

2. Like the Measles epidemic in November 2019, where schools and day care centers were suspended, is it permissible for Flex-Scheduling to perform work from home with a child in the home?

   a. A department or agency that has a general bar on Flex-Scheduling when there are young children requiring care and supervision as a special exception, such as the COVID-19, would be expected to account for work and non-work hours during the approved period of flex accommodation to take appropriate leave (AL/LWOP) to account for the time spent away from normal work related duties (i.e. to care for child or small children).

3. If an employee runs out of sick leave, can the agency grant advanced sick leave to an employee who is ill (symptomatic) due to COVID-19, or must care for a family member who is ill?

   a. No. Advanced sick leave is not an employee entitlement and may only granted with the approval of the Governor.

4. If an employee is healthy but stays home because his or her asymptomatic family member has been quarantined due to exposure to COVID-19, in what pay/leave status is the employee placed?

   a. Currently, an employee may use annual, sick, or compensatory time off to care for a family member who is healthy but has been quarantined due to COVID-19.

5. If the Governor declares COVID-19 to be a pandemic, can an agency order one or more employees to evacuate their offices to work from home?

   a. It depends. However, it is highly encouraged that Departments and Agencies review their concept of operations to be able to sustain minimal functions on a “skeletal staffing” matrix, either with employees who have been approved for Flex-Scheduling or a team of employees with critical functions to remain unless otherwise instructed by the Office of the Governor.

VI. ADVISORIES & GUIDANCE FOR SENIOR CITIZENS

The Territory Administration on Agency will use the advisories and guidance provided in the health hygiene protocols to prepare presentations, flyers, and brochures for distribution to the Senior Citizen population of American Samoa who are deemed to be most vulnerable to the coronavirus.
The Territorial Administration on Aging will closely collaborate with the Department of Health and the LBJ Tropical Medical Center in educating and making the seniors fully aware of the best hygiene practices which they must practice each day.

**TAOA - Fact Sheet**

What do Older Adults and People with Disabilities Need to Know?

- Early data suggest older people are twice as likely to have serious COVID-19 illness.
- This may be because immune systems change with age, making it harder to fight off diseases and infection.
- Older adults also are more likely to have underlying health conditions that make it harder to cope with and recover from illness.

*In addition, people of all ages, with or without disabilities, seem to be at higher risk for getting very sick from COVID-19 if they have serious chronic medical conditions like heart, lung or kidney disease.*

**Reducing exposure is especially important for people at higher risk of complications!**

If you are at higher risk, Am. Samoa Department of Health recommends that you:

- Stay at home as much as possible if COVID-19 is spreading in your community.
- Make sure you have access to several weeks of medications and supplies in case you need to stay home for prolonged periods of time. [CDC has great resources](https://www.cdc.gov) to help you plan.

**Everyday actions to prevent illness**

Everyone, regardless of age or disability, should follow ASDOH’s recommendations to help prevent the spread of all respiratory diseases, including colds and flu and COVID-19. For example:

- Avoid close contact with people who are sick.
- Avoid touching your eyes, nose, and mouth.
- Stay home when you are sick.
Watch for symptoms and emergency warning signs

- COVID-19 symptoms include fever, cough, and shortness of breath. If you feel like you are developing symptoms, call DOH Command Post at 633-5871/5872.
- If you develop emergency warning signs for COVID-19 get medical attention immediately. These include:
  - Difficulty breathing or shortness of breath
  - Persistent pain or pressure in the chest
  - New confusion or inability to arouse
  - Bluish lips or face
  - This list is not all inclusive. Consult your medical provider for any other symptom that is severe or concerning.

Follow DOH & LBJ guidance:

Decisions about community measures will be made by ASDOH Health Officials, in consultation with federal officials as appropriate, based on the scope of the outbreak and the severity of illness. It's important for older adults and people with disabilities, as well as families and the organizations in the aging and disability networks who support them, to pay close attention to information and instructions published by ASDOH.

VII. DIAL-A-RIDE GUIDANCE AND ADVISORIES

The Dial-A-Ride project administered by the Department of Public Works offers transportation to seniors, physically challenged, and other special population of American Samoa. It is currently estimated that 1,400 weekly rides are accommodated by this program. The risk is high for propagation of the coronavirus thus health protocols will be adopted to abate the risk of spreading the coronavirus. Appropriate policy is being developed along with protocols for disclosure and incorporated in this document soon.

VIII. PUBLIC AWARENESS AND EDUCATION CAMPAIGN

The Department of Health is spearheading the Public Awareness and Education Campaign aimed to inundated the community with information on the coronavirus so they take ownership of self-responsibility to protect themselves from being infected by the coronavirus together with knowing what to do if they suspect that they might be infected.

- Brochures have been developed both in the Samoan and English Languages for immediate distribution.
- Television forums will be conducted by health professionals to ensure that the information delivered to the public is accurate and easy to understand.
Radio programs will also be conducted to deliver the same message to the community and will be conducted by the health professionals as well.

The Department of Health is deploying its comprehensive community campaign wherein all villages are visited by the Department of Health Team to get the word out on the coronavirus.

The Local Government infrastructure is being compelled to work with the Department of Health and the LBJ Tropical Medical Center to get the message out to the villages to report individuals with possible coronavirus symptoms so appropriate response is activated.

The Office of Public Information is charge to provide every assistance possible to facilitate implementation of the Community Awareness and Education Program.

IX. FINANCIAL PROPOSAL

General Healthcare Capacities:

The operating capacities of our only acute care facility and our Department of Health are stretched thinly thus precluding launching an effective, aggressive, efficacious, and campaign to combat the spread of the Coronavirus. Our fight relative to containing the spread of the Measles virus is winding down but the financial impact on our financial resources was overwhelming which exacerbated the efforts to respond to this more deadly virus.

The Department of the Interior executed the Congressional Mandate calling for the assessment of the Territory of American Samoa’s healthcare system particularly the LBJ Tropical Medical Center. The assessment was conducted by United States Army Corp of Engineers. The assessment was comprehensive and it identified all of the deficiencies attributed to antiquated physical facilities which we are aggressively attempting to upgrade. We are grateful to you and the Department for continuing provide funds to finance this facility improvement program. The health treatment demands for the Coronavirus find us scrambling to secure space to isolate infected away from the general patient population. Funds are being spent right now with the hope of reimbursement to create an isolation ward to safely treat coronavirus patients. These costs are reflected in our funding request.

Bases for Financial Plan Development:

The healthcare service delivery challenges are clearly document in the earlier sections of this Response & Action Plan. Specifically, testing kits, protective gear, masks, equipment, gowns, medical supplies, and physical facilities are need to quarantine and isolate suspected cases.

The remote geographic location of American Samoa elevates the level of the cost of planned tasks and activities to implement the protocols, advisories, and guidance articulated in this Response & Action Plan. Transporting supplies is a constant challenge, and disruption of service will effectively create a true health crisis for American Samoa. There is already a noticeable shortage in goods because the vessels are being impacted by the Coronavirus.
The economy is also feeling the adverse impact of the coronavirus which is also negatively affecting the American Samoa Government’s revenue posture disabling it from financing all of the planned expenditures connected with combating and mitigating the effects of the Coronavirus.

**X. ECONOMIC IMPACT OF MEASLES & CORONAVIRUS OUTBREAK**

Since the Governor of American Samoa first issued a declaration of public health emergency on November 13, 2019, the territorial government has spent approximately $1.6 Million on containment and preventative measures. Additionally, the amendment to the public health emergency that was issued on December 8, 2019 initiated a full closure of schools and daycares and set in place restrictions on public gatherings that lasted until December 16th, 2019. Additional amendments were subsequently issued by the Governor’s office in response to the developing, global novel coronavirus (COVID-19) outbreak, which was followed by several additional travel restrictions. A decrease in economic activity followed the December 8th amendment that directly impacted hundreds of private sector businesses and thousands of workers.

The following graph details the breakdown of the direct costs incurred by the American Samoa Government (ASG) during the efforts to contain the measles outbreak and total anticipated expenditures on the containment of COVID-19. Initial costs began to accumulate after the initial declaration of public health emergency on November 13, 2019. Since that time, 443 ASG employees worked nearly 40,000 regular work hours and more than 150,000 overtime hours on Measles containment and several thousand additional hours are expected to be devoted to the COVID-19 containment efforts. Total labor costs that attributed to the outbreaks are estimated to be $1,530,326.
The largest Measles containment expenditure was the purchase of MMR vaccination vials. The total number of individuals requiring this vaccination was estimated to be 15,841. Although the Centers for Disease Control and Prevention (CDC) provided the American Samoa Department of Health (DOH) with 7,000 infant and toddler doses, another 8,841 doses were necessary to inoculate the remaining individuals. The cost of procuring these MMR vials from a private vendor was estimated to be $744,604, with another $46,320 expensed on the procurement of related medical supplies. When additional medical supplies required to combat COVID-19 is factored in, total supply expenditures are anticipated to be $7,836,933. Logistics costs, which included fuel, transportation, public service marketing, and miscellaneous goods and services that are necessary during the containment and disease management efforts, were valued at $5,289,989.

Total estimated containment costs to ASG were $15,042,755. When the value of the MMR vials that were provided by the CDC are included, the total cost of containment increases to $15,389,465, which is roughly equal to 2.4% of American Samoa’s 2018 nominal gross domestic product.

The impact to the local economy goes beyond the cost of containment and the preventative costs. These impacts include the effects that school and daycare closures, public gathering restrictions, and travel limitations have had on private businesses and employees. 11,400 pre-school and elementary school aged children and 164 private school staff missed 10 school days during the closure, while 900 children that regularly attend day care and 215 workers missed 22 days or
more during the measles-related closures, resulting in an estimated income loss of $321,000 for staff and faculty.

Roughly 85% of parents surveyed suggested that at least one gainfully employed adult in the household would be required to take time off from work to care for children during the mandatory school and day care closures. When the average hourly wage and average number of school age children per household are considered, the time taken off of work by parents resulted in an estimated $2.8 Million in foregone regular wages and income in late 2019 and early 2020. This loss of income is expected to drive the average annual in American Samoa down by $87.11 in 2020. Any additional school and daycare closures that may result from COVID-19 would be expected to have a proportional impact.

Additionally, seven passenger leisure cruise ships that were scheduled to visit Pago Pago between December 2019 and March 2020 have cancelled their excursions to the territory as a direct result of the outbreaks. The number of passengers and disembarking crew from these cruise ships is estimated to be nearly 14,000. The loss of these cruise ship passengers and crew is anticipated to have led to $1.5 million in foregone durable, nondurable, and service consumption by cruise ship visitors to the territory. Similarly, an outbreak-related decrease in air visitors to American Samoa is estimated to lead to $2.0 million in foregone durable, nondurable, and service consumption by air visitors in 2020.

In analyzing the impacts of the Measles and COVID-19 outbreaks on territorial gross domestic product (GDP), the revenue and income losses outlined above are partially offset by higher territorial government spending. Specifically, outbreak-related expenditures by the territorial government may be as much as $14.7 million higher in 2020 than expected if the outbreaks had not occurred, while consumer and business spending on goods and services and net exports, combined, are predicted to be approximately $19.7 million lower. As such, 2020 nominal GDP is estimated to be $5.0 million (0.8%) lower in this scenario. Adjusted for inflation, GDP is forecast to be $3.6 million (-0.6%) lower in 2020.

Additional details of the assessed impacts of the 2019-20 Measles and COVID-19 outbreaks on the economy of American Samoa can be found in the following tables.
### American Samoa Economic Forecast Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Year</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>AS Nominal Gross Domestic Product ($ Million)</td>
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<td>-1.0</td>
</tr>
<tr>
<td>Annual Growth (%)</td>
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<td>-0.1</td>
</tr>
<tr>
<td>AS Real Gross Domestic Product (2009$ Million)</td>
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<td>-0.4</td>
</tr>
<tr>
<td>Annual Growth (%)</td>
<td></td>
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<tr>
<td>AS Average Annual Wage ($/yr)</td>
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<td>Annual Growth (%)</td>
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<tr>
<td>AS Personal Income ($ Million)</td>
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<tr>
<td>Annual Growth (%)</td>
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<td>-0.4</td>
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<tr>
<td>ASG Revenues ($ Million)</td>
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<tr>
<td>Annual Growth (%)</td>
<td></td>
<td>-0.2</td>
</tr>
<tr>
<td>Population</td>
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<tr>
<td>Annual Growth (%)</td>
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<tr>
<td>AS Consumer Price Index</td>
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<tr>
<td>Annual Growth (%)</td>
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<tr>
<td>AS GDP Deflator</td>
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<tr>
<td>Annual Growth (%)</td>
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<tr>
<td>AS Government Revenues ($Million)</td>
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<tr>
<td>Annual Growth (%)</td>
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### American Samoa Economic Forecast - Measles Outbreak Impact

<table>
<thead>
<tr>
<th>GDP Components - Current Dollars</th>
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<th>Forecast</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Nominal Gross Domestic Product ($ Million)</td>
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<td>-1.0</td>
</tr>
<tr>
<td>Difference (%)</td>
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<td>-0.1</td>
</tr>
<tr>
<td>Personal Consumption ($ Million)</td>
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<td>-1.2</td>
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<tr>
<td>Difference (%)</td>
<td></td>
<td>-0.2</td>
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<tr>
<td>Business Investments ($ Million)</td>
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<td>0.0</td>
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<tr>
<td>Difference (%)</td>
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<tr>
<td>Government Spending ($ Million)</td>
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<tr>
<td>Difference (%)</td>
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<td>0.2</td>
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<tr>
<td>Net Exports ($ Million)</td>
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<td>-0.4</td>
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<tr>
<td>Difference (%)</td>
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<td>-0.2</td>
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</table>

49
American Samoa Economic Forecast - Measles Outbreak Impact

<table>
<thead>
<tr>
<th>GDP Components - Chained 2009 Dollars</th>
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<th>2020</th>
<th>2021</th>
<th>2022</th>
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<tr>
<td><strong>Category</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Real Gross Domestic Product (2009$ Million)</strong></td>
<td>-0.4</td>
<td>-3.6</td>
<td>0.1</td>
<td>-0.3</td>
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<tr>
<td>Difference (%)</td>
<td>-0.1</td>
<td>-0.6</td>
<td>0.0</td>
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<tr>
<td><strong>Real Personal Consumption (2009$ Million)</strong></td>
<td>-0.5</td>
<td>-4.1</td>
<td>1.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Difference (%)</td>
<td>-0.1</td>
<td>-1.1</td>
<td>0.3</td>
<td>0.1</td>
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<tr>
<td><strong>Real Business Investments (2009$ Million)</strong></td>
<td>0.0</td>
<td>-0.1</td>
<td>-0.3</td>
<td>-0.4</td>
</tr>
<tr>
<td>Difference (%)</td>
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<td>-0.3</td>
<td>-0.8</td>
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<tr>
<td><strong>Real Government Spending (2009$ Million)</strong></td>
<td>0.5</td>
<td>11.5</td>
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<tr>
<td>Difference (%)</td>
<td>0.2</td>
<td>4.4</td>
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<tr>
<td><strong>Real Net Exports (2009$ Million)</strong></td>
<td>-0.4</td>
<td>-11.0</td>
<td>-1.1</td>
<td>-0.3</td>
</tr>
<tr>
<td>Difference (%)</td>
<td>0.4</td>
<td>12.8</td>
<td>1.5</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Economic Policy Recommendations:

1. Establish a workgroup to assess detailed impacts to businesses by industry.
   a. This would be a collaboration between the Department of Commerce, private sector partners, and other key stakeholders.

2. Establish a separate workgroup to make recommendations/update State of Emergency Powers/Provisions (i.e. Procurement process being streamlined during state of emergency) to include other business/employment sector-facing provisions that help sustain business, build reserves, and support employment. This could include the reduction of excise tax on essential perishable food items; excise tax reduction on supplies and materials used to produce food items (i.e. bottles for locally produced bottled water), etc.; provisions to allow for (government) workers to telecommute to avoid lost wages as a result of school closures (no day care); etc.

3. Assess the feasibility of establishing a local state of emergency Revolving Loan Fund that would be accessible to qualified businesses following emergency declarations. The funding mechanism would ideally be a more streamlined than SBA loans, which are often unavailable in the critical days and weeks following an emergency declaration.

4. Public-Private Partnerships to identify opportunities for the leveraging of resources via agreements/MOU to support response and recovery efforts in times of crises (natural, man-made, and/or epidemic).

5. Creation of a public-private disaster group comprising key businesses and relevant government agencies and immediately activated when necessary to mobilize resources as Federal assistance is pending.

1. Updating the Territorial Emergency Operations Plan (TEOP) to include response to Outbreaks/Pandemics.

2. Roundtable and Full-scale exercises re: epidemic/pandemics involving critical first responders and community stakeholders.

3. Elevating the potential threats of outbreaks into the Threats and Hazards Identification Risk Assessment (THIRA) to communicate current vulnerabilities, capabilities, and resource gaps to FEMA and relevant entities (CDC).

Tele-Health
Our long-term approach to containing and managing the spread of Coronavirus is the deployment of telecommunications systems and technologies in order to connect local patients with highly trained, off-island healthcare providers. It is possible to provide the residents of American Samoa 24 hours access to doctors in Hawaii via Tele-Health Care Mobile and web-based application. The cost to implement this service is estimated to be up to $1.095 million.

Coronavirus Budget Proposal:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Personnel</th>
<th>Contractual Services</th>
<th>Equipment</th>
<th>TeleHealth</th>
<th>Supplies</th>
<th>All Others</th>
<th>Facilities</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Health</td>
<td>$1,080,000</td>
<td>$148,000</td>
<td>$833,935</td>
<td>$1,095,000</td>
<td>$1,151,510</td>
<td>$1,000,000</td>
<td>$400,000</td>
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<tr>
<td>LBJ Medical</td>
<td>$1,097,000</td>
<td>$870,000</td>
<td>$3,560,675</td>
<td>$416,941</td>
<td>$2,350,000</td>
<td>$150,000</td>
<td>$8,444,616</td>
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<tr>
<td>Public Works</td>
<td></td>
<td>$430,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2,820,000</td>
</tr>
<tr>
<td>Total</td>
<td>$2,177,000</td>
<td>$1,018,000</td>
<td>$4,824,610</td>
<td>$1,095,000</td>
<td>$1,568,451</td>
<td>$3,350,000</td>
<td>$2,940,000</td>
<td>$16,973,061</td>
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Department of Health Budget Breakdown

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Description</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Doctors: $63,000/annual Nurses</td>
<td>8</td>
<td>$504,000</td>
</tr>
<tr>
<td></td>
<td>1. Registered Nurse: $40,000</td>
<td>6</td>
<td>$240,000</td>
</tr>
<tr>
<td></td>
<td>2. Licensed Practical Nurse $25,000</td>
<td>6</td>
<td>$150,000</td>
</tr>
<tr>
<td></td>
<td>3. Certified Nurse Assistants $12,000</td>
<td>10</td>
<td>$120,000</td>
</tr>
<tr>
<td></td>
<td>Support Personnel $11,000</td>
<td>6</td>
<td>$66,000</td>
</tr>
<tr>
<td>Personnel Subtotal</td>
<td></td>
<td></td>
<td>$1,080,000</td>
</tr>
<tr>
<td>Contractual &amp; Training</td>
<td>1. Proper handling of PPEs</td>
<td>-</td>
<td>$7,000</td>
</tr>
<tr>
<td></td>
<td>2. How to properly transport possible suspected COVID-19 patients to hospital</td>
<td>-</td>
<td>$7,000</td>
</tr>
<tr>
<td></td>
<td>3. Proper decontamination of equipment, vehicles, facilities, etc.</td>
<td>-</td>
<td>$6,000</td>
</tr>
<tr>
<td></td>
<td>4. Tabletop Exercise</td>
<td>-</td>
<td>$8,000</td>
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<tr>
<td></td>
<td>5. Readiness Operational Capabilities Drill (ROC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Leased Vehicles (9 months @2K per month)</td>
<td>6</td>
<td>$108,000</td>
</tr>
<tr>
<td></td>
<td>7. Translation</td>
<td></td>
<td>$5,000</td>
</tr>
</tbody>
</table>

| Training Subtotal | | | $148,000 |

| Supplies | 1. Gowns $135.00/case (2x, 3x,4x) | 50c | $6,750 |
| | 2. Masks $119.00/100 per cs | 100c | $11,900 |
| | 3. Face Shields $40.00/bx-5 per bx | 100bx | $4,000 |
| | 4. Gloves $99.99/2K per cs (XL) | 50c | $5,000 |
| | 5. Hand sanitizers $24.00 (4/bx) | 300bx | $7,200 |
| | 6. Shoe covers $45.00 (150 pairs) | 300bx | $13,500 |
| | 7. Oxygen tanks $496.00 (large 10L;10sm) $60.00 (small tank/6x) | | $5,560 |
| | 8. Oxygen masks $50.00 (Adult & Children Adjustable masks – 20/cs) | 100cs | $5,000 |
| | 9. Hazardous Disposable Bags $66.00/case (Large bags) | 100cs | $6,600 |
| | 10. Decontamination agents | 1000cs | $200,000 |
| | 11. Test Kits | 1,000 | $600,000 |
| | 12. Bed Sheets: $50.00 | 1,000 | $50,000 |
| | 13. Pillowcases: $40.00 | 1,000 | $40,000 |
| | 14. Blankets: $25.00 | 1,000 | $25,000 |
| | 15. Alcohol pads | 20cs | $40,000 |
| | 16. Glucometer: $50.00 | 20 | $1,000 |
| | 17. Glucometer strips: $65.00/box | 2000bx | $130,000 |

| Supplies Subtotal | | | $1,151,510 |

| Facilities | 1. Additional quarantine facilities | - | $200,000 |
| | 2. Isolation Room/Field Hospital | - | $200,000 |

<p>| Facilities Subtotal | | | $400,000 |</p>
<table>
<thead>
<tr>
<th>Equipment</th>
<th>Qty</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>1. Diagnostic Sets wall-mount (12) $500</td>
<td>12</td>
<td>$6,000</td>
</tr>
<tr>
<td>2. Diagnostic Set portable (12) $750</td>
<td>2/6mos</td>
<td>$8,400</td>
</tr>
<tr>
<td>3. Field Hospitals (2) 700/month</td>
<td>20</td>
<td>$72,000</td>
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<tr>
<td>4. Hospital Beds (20) $3,600 (up to 600lbs)</td>
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<td>$3,000</td>
</tr>
<tr>
<td>5. Pulse oximeter $300.00</td>
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<tr>
<td>6. Blood pressure monitors $650.00</td>
<td>12</td>
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<tr>
<td>7. Infrared forehead Thermometers $102.00</td>
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</tr>
<tr>
<td>8. Gurneys $4,500 (up to 600lbs)</td>
<td>10cs/ea</td>
<td>$5,000</td>
</tr>
<tr>
<td>9. Bariatric Wheelchairs $450 (up to 600lbs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. IV fluids -Lactated ringers 250cc (10) &amp; 500cc (10)/normal saline 250cc (10) &amp;500cc (10) $125.00/cs</td>
<td>5cs</td>
<td>$545.00</td>
</tr>
<tr>
<td>11. IV extensions $109.00/cs (5cs)</td>
<td>5cs</td>
<td>$5,570</td>
</tr>
<tr>
<td>12. IV sets $143.00/cs (5cs)</td>
<td>5cs</td>
<td>$5,570</td>
</tr>
<tr>
<td>13. Pediatric sets $143.00/cs (5cs)</td>
<td>5cs</td>
<td>$5,570</td>
</tr>
<tr>
<td>14. Angio cath (18gauge, 20gauge, 22gauge, 24 gauge) $366/cs (depend on size)- (5cs ea)</td>
<td>5cs</td>
<td>$715.00</td>
</tr>
<tr>
<td>15. Suction machines (2x) $1,114.00 (5cs)</td>
<td>5cs</td>
<td>$3,526</td>
</tr>
<tr>
<td>16. Vital Signs Monitors (x14) $700</td>
<td>100bx</td>
<td>$4,000</td>
</tr>
<tr>
<td>17. Autoclaves $5,566 (5)</td>
<td>14</td>
<td>$7,000</td>
</tr>
<tr>
<td>18. Intubation</td>
<td>2</td>
<td>$60,000</td>
</tr>
<tr>
<td>19. Furniture for quarantine facility (chairs, bed-side tables, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Lancets: $40.00 bx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Scales (600lbs capacity): $500.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Thermal Body Scanner</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Equipment Subtotal** | **$833,935**

**Tele-Health** | **1** | **$1,095,000**

**Tele-Health Subtotal** | **$1,095,000**
### Other

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Awareness via radio stations, television, newspaper</td>
<td>$250,000</td>
</tr>
<tr>
<td>Village outreach-church</td>
<td>$250,000</td>
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<tr>
<td>Meals for the quarantine facilities</td>
<td>$500,000</td>
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**Other Subtotal** $1,000,000

**TOTAL BUDGET REQUEST** $5,708,445

### LBJ Tropical Medical Center Budget Breakdown

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Description</th>
<th>Quantity</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>Doctors – (4 months contract)</td>
<td>8</td>
<td>$400,000.00</td>
</tr>
<tr>
<td></td>
<td>Locum Tenens: $100,000.00 - $200,000.00 (per annum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nurses (4 months contract)</td>
<td>4</td>
<td>$192,000.00</td>
</tr>
<tr>
<td></td>
<td>4. Travel Registered Nurses: $</td>
<td>4</td>
<td>$70,000.00</td>
</tr>
<tr>
<td></td>
<td>5. Local Registered Nurses:</td>
<td>5</td>
<td>$120,000.00</td>
</tr>
<tr>
<td></td>
<td>6. Infection Disease Consultants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ancillary</td>
<td>1. Pharmacist</td>
<td>1</td>
<td>$35,000.00</td>
</tr>
<tr>
<td></td>
<td>2. Pharmacy Technicians</td>
<td>2</td>
<td>$20,000.00</td>
</tr>
<tr>
<td></td>
<td>3. Phlebotomists</td>
<td>6</td>
<td>$40,000.00</td>
</tr>
<tr>
<td></td>
<td>4. Laboratory Technologists</td>
<td>3</td>
<td>$30,000.00</td>
</tr>
<tr>
<td></td>
<td>5. Radiological Technologists</td>
<td>3</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>Support Personnel</td>
<td>1. Housekeeping / Environmental Services</td>
<td>9</td>
<td>$60,000.00</td>
</tr>
<tr>
<td></td>
<td>2. Security</td>
<td>2</td>
<td>$15,000.00</td>
</tr>
<tr>
<td></td>
<td>3. Inventory Staff</td>
<td>2</td>
<td>$15,000.00</td>
</tr>
<tr>
<td></td>
<td>4. Supply Stocking</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Dietary</td>
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**Personnel Subtotal** $1,097,000.00
<table>
<thead>
<tr>
<th>Contractual &amp; Training</th>
<th>1. Behavioral Health Building Conversion – Convert Private Rooms to Negative Pressure Rooms (10 Rooms) – Construction</th>
<th>10 Rooms</th>
<th>$850,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Education – Training (Staff for COVID-19)</td>
<td>-</td>
<td>$20,000.00</td>
</tr>
<tr>
<td>Contractual / Training Subtotal</td>
<td></td>
<td></td>
<td>$870,000.00</td>
</tr>
<tr>
<td>Supplies</td>
<td>18. COVID-19 Test Kits</td>
<td>When Available</td>
<td></td>
</tr>
<tr>
<td></td>
<td>19. COVID-19 Vaccine</td>
<td>When Available</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20. Scrubs Small</td>
<td>20 c</td>
<td>$2,000.00</td>
</tr>
<tr>
<td></td>
<td>21. Scrubs Medium</td>
<td>40 c</td>
<td>$2,380.00</td>
</tr>
<tr>
<td></td>
<td>22. Scrubs Large</td>
<td>40 c</td>
<td>$3,440.00</td>
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<tr>
<td></td>
<td>23. Scrubs XL, XXL, 3XL</td>
<td>4 c/size</td>
<td>$15,960.00</td>
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<tr>
<td></td>
<td>24. Stethoscope (Disposable)</td>
<td>50 pcs</td>
<td>$750.00</td>
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<tr>
<td></td>
<td>25. Aneroid Sphygomomanometer</td>
<td>20 pcs</td>
<td>$1,200.00</td>
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<tr>
<td></td>
<td>26. Regular Surgical Mask (s,m,l)</td>
<td>100 cs/size</td>
<td>$19,980.00</td>
</tr>
<tr>
<td></td>
<td>27. N95 Masks (s,m,l)</td>
<td>100 cs/size</td>
<td>$19,980.00</td>
</tr>
<tr>
<td></td>
<td>28. Regular Hospital Gloves – small</td>
<td>100 cs</td>
<td>$9,100.00</td>
</tr>
<tr>
<td></td>
<td>29. Regular Hosp Gloves – medium</td>
<td>100 cs</td>
<td>$8,333.00</td>
</tr>
<tr>
<td></td>
<td>30. Regular Hosp Gloves – large</td>
<td>100 cs</td>
<td>$8,750.00</td>
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<tr>
<td></td>
<td>31. IV Saline – 0.9% NSS, 250 ml</td>
<td>100 cs</td>
<td>$42,405.00</td>
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<tr>
<td></td>
<td>32. IV Saline – Isolyte</td>
<td>100 cs</td>
<td>$32,900.00</td>
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<tr>
<td></td>
<td>33. IV Saline – LR, 1000ml</td>
<td>100 cs</td>
<td>$27,000.00</td>
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<tr>
<td></td>
<td>34. IV Tubing/SmartSite Inf. Allaris</td>
<td>100 cs</td>
<td>$15,120.00</td>
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<tr>
<td></td>
<td>35. Allaris Pmp-Cmb PC Un – Syringe</td>
<td>40 units</td>
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<tr>
<td></td>
<td>36. Isolation Gowns (Disp) Med</td>
<td>100 cs</td>
<td>$11,900.00</td>
</tr>
<tr>
<td></td>
<td>37. Isolation Gowns (Disp) Large</td>
<td>100 cs</td>
<td>$8,600.00</td>
</tr>
<tr>
<td></td>
<td>38. Isolation Gowns (Disp) XL</td>
<td>100 cs</td>
<td>$13,300.00</td>
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<tr>
<td></td>
<td>39. Endotracheal Tubes (All sizes)</td>
<td>100 cs/size</td>
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<tr>
<td></td>
<td>40. Blankets / Thermo Reg</td>
<td>20 units</td>
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<tr>
<td></td>
<td>41. Pillows</td>
<td>100 pcs</td>
<td>$1,259.00</td>
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<td>42. IV Catheters – g18</td>
<td>100 cs</td>
<td>$3,674.00</td>
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<tr>
<td></td>
<td>43. IV Catheters – g20</td>
<td>100 cs</td>
<td>$3,612.00</td>
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<tr>
<td></td>
<td>44. IV Catheters – g22</td>
<td>100 cs</td>
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</tr>
<tr>
<td></td>
<td>45. IV Catheters – g24</td>
<td>100 cs</td>
<td>$3,674.00</td>
</tr>
<tr>
<td></td>
<td>46. Cassettes for ABG</td>
<td>50 cs</td>
<td>$12,950.00</td>
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<td>Supplies Subtotal</td>
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<td>Facilities</td>
<td>Description</td>
<td>Quantity</td>
<td>Unit Cost</td>
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<tr>
<td>------------------</td>
<td>--------------------------------------------------</td>
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<tr>
<td>3.</td>
<td>Tents – Negative Pressure Iso Tent</td>
<td>1 unit</td>
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<tr>
<td>4.</td>
<td>Medical Triage Tent</td>
<td>1 unit</td>
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<td><strong>Facilities Subtotal</strong></td>
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</tr>
<tr>
<td>Equipment</td>
<td>23. 40-KW Generators</td>
<td>2 units</td>
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</tr>
<tr>
<td></td>
<td>24. Isolation Carts</td>
<td>4 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25. Vital Signs Machine (Portable)</td>
<td>5 pcs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26. Oxygen Tank Size C</td>
<td>20 units</td>
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</tr>
<tr>
<td></td>
<td>27. Suction/Aspirator w 800cc Disp</td>
<td>20 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28. Oxygen Gauges – small</td>
<td>20 pcs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>29. Oxygen Gauges – large</td>
<td>20 pcs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30. Pediatric Portable Ventilators</td>
<td>20 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31. Cots</td>
<td>50 pcs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32. Wheelchairs – regular</td>
<td>10 pcs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>33. Wheelchairs – Heavy Duty</td>
<td>10 pcs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34. Gurneys</td>
<td>20 pcs</td>
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</tr>
<tr>
<td></td>
<td>35. Dial Rates IV Regulators</td>
<td>20 units</td>
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</tr>
<tr>
<td></td>
<td>36. Central Lines – Pediatric</td>
<td>50 cs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>37. Central Lines – Adults</td>
<td>50 cs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>38. Portable Pulse Oximeter</td>
<td>30 pcs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>39. ABG Portable Reader</td>
<td>2 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40. Dialysis machines (Isolation PT)</td>
<td>5 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>41. Dialysis chairs</td>
<td>5 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>42. Hospital Beds/Tables/Cabinets</td>
<td>15 units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>43. Oxygen Air Generator</td>
<td>1 unit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>44. Medical Air compressor</td>
<td>1 unit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>45. Medical Vacuum</td>
<td>1 unit</td>
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<tr>
<td><strong>Equipment Subtotal</strong></td>
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<td></td>
</tr>
<tr>
<td>Other</td>
<td>1. Pharmaceuticals – Medication</td>
<td>-</td>
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<tr>
<td></td>
<td>2. Relocation of BH Patients to new location</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Ambulances</td>
<td>2 units</td>
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<tr>
<td>Meals for the quarantine facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Subtotal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL BUDGET REQUEST</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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March 10, 2020

To: Secretary of Samoan Affairs, Attorney General, CEOs, Presidents, Directors, & Executive Directors

From: Governor of American Samoa

Subject: The Coronavirus Task Force and Coronavirus Working Group

On January 30, 2020, the International Health Regulations Emergency Committee of the World Health Organization declared the outbreak of a public health emergency of international concern. On January 31, 2020, Health and Human Services Secretary Honorable Alex M. Azar II declared a public health emergency (PHE) for the United States to aid the nation’s healthcare community in responding to COVID-19.

Since the promulgation of these two declarations, we immediately took steps to prevent and preempt the entry of this virus into American Samoa. The disclosure of this pandemic in the midst of the Measles Outbreak caused the extension of the same protocols and advisories on our initiative to contain the spread of the Coronavirus. Furthermore, a group was appointed to prepare our Coronavirus Action Plan to be submitted to the Department of the Interior, CDC, the White House, DHHS, and our Delegate to Congress articulating our needs.

The speed at which the incidence of the Coronavirus is being propagated throughout the United States gives us cause to formalize the establishment of our Task Force charged with the responsibility to prepare our comprehensive Action Plan aimed to combat the entry, spread, and treatment of the Coronavirus in our territory for review and approval by the Lieutenant Governor and I with intended submission to Honorable David Bernhardt, Secretary of the Interior for subsequent transmittal to CDC, the White House, DHHS, and appropriate agencies of the Federal Government involved with combating the spread of the Coronavirus. The Coronavirus Task Force membership shall include the following heads of the following agencies of the American Samoa Government. The Director of the VA Clinic is included as a member as well to ensure arms-length collaboration and coordination of efforts ensuring inclusion of all members of community.
Paramount Chief Mauga Tasi Asuega, Secretary of Samoan Affairs
Mitzie Jessop Ta'ase, Attorney General of American Samoa
Faumuina John Faumuina, Chief Executive Officer, LBJ Tropical Medical Center
Motusa Tuileama Nua, Director, Department of Health
Dr. Ruth Matagi Tofiga, Director, Department of Education
Taimalelagi Dr. Claire Tuia Poumele, Director, Department of Port/Airport Administration
Dr. Iotamo Saleapaga, Chief Medical Officer, LBJ Tropical Medical Center
Dr. Saipale Fuimaono, Chief Medical Officer, Department of Health
Dr. Fred J. Uhrle Jr., Director, VA Medical Clinic
HTC Le’i Sonny Thompson, Commissioner of Public Safety
Saman Semo Ve’ave’a, Director, Department of Homeland Security
Sandra King Young, Executive Director, Medicaid Office – Office of the Governor
Dr. Rosevonne M. Pato, President, American Samoa Community College
Uelligitone Tonumaipe’a, Treasurer/Director, Department of Treasury
Fuiavaillili Kenesili Lafaele, Director, Department of Commerce
Eseneiaso J. Liu, Director, Department of Human Resources
Catherine Saelua, Director, Office of Program Planning and Budget
Faleosina Voigt, Director, Department of Public Works
Dr. Oreta Crichton, Director, Office of Procurement
Muavaea’atasi John Suiaala, Director, Department of Human & Social Services
Fa’amao Asalele, Executive Director, American Samoa Environmental Protection Agency
Evelyn Lili’o Satele, Director, Territorial Administration on Aging
Dr. Aifili John Tufa, Chief Epidemiology, Department of Health
Dr. Tuato’o Seakerise Tuato’o, Chief of Staff, LBJ Tropical Center
‘Iulogologo Joseph Pereira, Executive Assistant to the Governor

The Coronavirus Task Force shall be chaired by ‘Iulogologo J. Pereira with Faumuina and Nua serving as Co-Vice Chairs respectively.

The Coronavirus Working Group serving as staff to the Coronavirus Task Force is also established to perform research, drafting, documentation, and all other tasks assigned by the Coronavirus Task Force. The Coronavirus Working Group is chaired by the Chief of Staff Fiu J. Saelua with membership as follows:

Fuamatu J. Fuamatu, Western District Governor, Office Samoa Affairs
William Ledoux, Legal Counsel, Governor’s Office
Dr. Sala Mata’ese Samuelu, Director, Department of Agriculture
Dr. Pa’u Roy Ausage, Acting Director, Department of Youth and Women
Dr. Ti’a Mikaele Etuale, Executive Director, Drug Coalition
Dr. Tapa’au Dan Aga, Executive Director, Political Status, Constitution, & Federal Relations
Tuimavave Taulapa’i Laupola, Director, Office of Public Information (KVZK)
HTC Malaepeule L. Moliga, Director, Department of Administrative Services
Sharmain Mageo, Infection Preventionist, LBJ Tropical Medical Center
Simamoo Tuato’o, Nursing Director, LBJ Tropical Medical Center
Silia P. Time, Special Programs/CIP Administrator, Governor’s Office
Jerome Jerome, Administrator, Grant Management/Oversight/Accountability, Governor’s Office
Recognizing that the availability of financial resources is the key to the implementation of the content of Coronavirus Action Plan, there is also established an Off-Island Coronavirus Consulting Team to ensure that our financial needs are fully articulated in Washington D.C., Federal Agencies and the Congress of the United States. This Off-Island Consulting Team is comprised of the following:

Muliufi Hannemann
National Group in D.C.
Bettilou Taylor, Medicaid and Health Consultant in D.C.
Lydia Faleafine Nomura, DOI Field Representative

LOLO M. MOLIGA

cc: Honorable Lemanu Peleti Mauga, Lieutenant Governor
Honorable Gaoteote Pala’ie Tofau, President of the Senate
Honorable Savali Talavou Ale, Speaker of the House of Representatives
HTC Fiu J. Saelua, Chief of Staff
Standard Distribution List
12 March, 2020  Questions? Contact Lewis Wolman, lewis.wolman@astca.net


American Samoa is a small, remote, isolated, densely populated island community.

ASTCA cannot prevent the virus from arriving on our shores, or spreading throughout the community, but ASTCA can take steps that will slow the number of infections and the speed of the virus’s spread.

ASTCA can also take steps to make sure ASTCA is ready to provide reliable telecommunications as American Samoa responds to the Covid-19 threat. ASTCA anticipates a much greater reliance on telecom in the weeks and months ahead, due to the need to communicate more in times of trouble, magnified by the effects of social distancing (e.g., less physical interaction, more working from home with communication devices).

By increasing hygienic measures and practising social distancing, we will do our part to “flatten the curve” (see graphic below) so that when the virus is here, it will spread slowly and not overwhelm our health care system. https://globalnews.ca/news/6665558/coronavirus-flatten-the-curve/

For example,

- We will minimize staff entry to homes and offices where people are sick or self-quarantined. We ask for your cooperation and patience.
- We will curtail unnecessary activities that pose a risk.
- We will take steps to protect staff and customers, in our offices, stores and field work.

We will start to practise social distancing in our own operations. For example,

- Tele-work
- Stepped-up hygiene

---

[FLATTEN THE CURVE (Covid-19 infections)]
(Avoid overwhelming health care system)

Adapted from CDC / The Economist
March 12, 2020

Iologologo Joseph Pereira, Chairman  
Coronavirus Task Force  
Executive Assistant to the Governor  
Government of American Samoa  
Pago Pago, American Samoa. 96799

Dear Chairman Iologologo,

In response to the severity of health concerns raised by the COVID-19 virus, and given the fact that TAOA carries the responsibility of ensuring the Senior Citizen population of American Samoa is provided with all information and protective measures available, the following actions have been or will be implemented by TAOA and staff to ensure this is, in fact, the case:

- An emergency meeting has been held to inform all 120 SCSEP workers of risks, protective practices and information regarding the COVID-19 virus. DOH brochures were provided for all attendees.

- SCSEP program/job placement will be temporarily discontinued effective March 16, 2020 until further notice.

- All SCSEP participants placed in health facilities have been reassigned.

- All Congregate Meal program renewal requirements have been suspended for two months. This will not impact meal eligibility but will eliminate a required visit to the TAOA office.

- In partnerships with DYWA, seniors will sew their own reusable protective masks. While it is understood that masks may not prevent the virus, it is believed that masks will serve as a deterrent to the common practice of touching one’s face.

- There are no plans at this time to discontinue the Meal Program; however, all meal service duties at centers will be carried out by TAOA staff beginning March 17, 2020.

- Community outreach at all meal centers conducted regularly by TAOA staff and participants.

- Janitorial responsibilities have been upgraded to include frequent wipe-downs and thorough disinfecting of common areas.
• All employees who show signs of illness/fever are being sent home or told to stay home.

• Congregating amongst staff is discouraged; distancing is encouraged.

We take our unique responsibilities to the Senior Citizens of the Territory very seriously and welcome any additional COVID-19 preventive measures that may be recommended regarding their vulnerability in such times. We continue to monitor the CDC and Administration for Community Living (ACL) websites for additional announcements to ensure our seniors receive sufficient information regarding their health and well-being.

I commend you and the Coronavirus Task Force and the Coronavirus Working Group for the tremendous efforts being made to address the unique challenges presented by the COVID-19 pandemic and the prevention of its entry into American Samoa.

Our prayers for the good health and safety of our island community.

Sincerely,

Evelyn Lili‘o-Satele, Director
Territorial Administration on Aging

cc: Fiu Johnny Saelua, Chief of Staff
Coronavirus Working Group Chairman
While there are no confirmed cases of COVID-19 in American Samoa, we understand people in our community may feel concern about the safety of using our Dial-a-ride transit service. We want the public to know we take this situation seriously, and are taking actions to help prevent common illnesses from spreading and in the event, we should have a confirmed case.

Dial-a-ride Service Summary:

The Dial-a-ride service provides approximately 100-140 weekday trips totaling approximately 500-600 trips per week on 7 transit vehicles. Trip destinations are to the LBJ Medical center for Medical appointments, Health Centers, Financial institutions, Retirement & Social Security office, Food Stamp, TAOA employment and a few grocery shopping. Our ridership registration is currently at 1300 actively serving 600, with 279 riders using wheelchair.

Strategies for Preventive Measures:

1) Drivers & Dispatchers & Support Staff:
   a. The agency is closely coordinating with the local Coronavirus Task Force on updated information and reporting it back to drivers, dispatchers and transit staff to ensure the health and safety of riders and employees.
   b. Clear protocols and procedures for the cleaning and disinfection of vehicles has been reiterated to all Drivers & dispatchers.
   c. Inspection forms are in place for verifying the completion of tasks. Forms are signed by drivers and verified by shift dispatchers.
   d. Drivers & dispatchers have been equipped with hand sanitizers, Personal Protective Equipment (gloves), tissues for precautionary measures.
   e. Drivers & Dispatchers have been advised to stay home when feeling sick.

2) Dial-a-ride Vehicles:
   a. Posters are posted in the vehicles that encourage staying home when sick, cough and sneeze etiquette, proper hand washing techniques, Coronavirus pamphlet from local Dept. of Public Health for rider information.
b. Agency vehicle cleaning procedures has been updated to include nightly disinfecting of all transit vehicles. Exterior washing of buses has also been upgraded to three times a week.

c. No-touch disposal receptacles are provided in vehicles for use;

d. Vehicles are being sanitized by drivers after each group drop off and periodically throughout the day.

3) Outbreak response plan will be dependent on directives from Department of Health and Government declarations:

a. Continue with preventative measures as outlined above

b. Vehicles will be used for Emergency response if an outbreak/disaster is declared.

This plan is subject to be updated as new information become available.
March 12, 2020

AMERICAN SAMOA COMMUNITY COLLEGE MEMORANDUM #016-2020

TO: General Distribution

FROM: Dr. Rosevonne M. Pato
President, American Samoa Community College

SUBJECT: ASCC Immediate Action Plan for COVID – 19 Preparations

In accordance with the American Samoa Community College Governance Policies,

3016 Responsibility to College

“...shall be the primary responsibility of all levels of the American Samoa Community College management to enforce safety procedures to safeguard its employees and clients. Safe practices on the part of all employees must be part of all operations.”

and

3016.1 Emergency Situations

“The President shall establish administrative procedures and plans of action to enable the faculty, staff, and students to respond appropriately during emergency situations.”

The following Action Plan will take effect immediately to ensure a safe and healthy work environment:
Travelers:

1. All employees of ASCC who have travelled through the ASCC Travel Authorization and are returning to American Samoa and to the ASCC campus workplace (as of the issuance of the *ASG GM -024 Suspension of ASG Travel Due to Coronavirus* and *ASCC Memorandum #014 – 2020 Revised Travel Advisory*), upon return from travel will remain in self quarantine at home for the recommended 14-day period as advised by the ASG Department of Health. The ASCC employee will be issued administrative leave for this period of home quarantine.

2. All employees who travel off island (out of the AS territory) for personal reasons, upon return from travel and to the ASCC campus workplace (as of the issuance of the *ASG GM -024 Suspension of ASG Travel Due to Coronavirus* and *ASCC Memorandum #014 – 2020 Revised Travel Advisory*), will remain in self quarantine at home for the recommended 14-day period as advised by the ASG Department of Health. The ASCC employee will take sick leave, annual leave or LWOP dependent on the leave accrued. Leave Sharing and Advanced Leave do not apply for this containment period.

3. All ASCC employees and ASCC students have a responsibility to report any off-island travel taken (as of the issuance of the *ASG GM -024 Suspension of ASG Travel Due to Coronavirus* and *ASCC Memorandum #014 – 2020 Revised Travel Advisory*) to the respective supervisor, instructor, or administrator and may need to be issued a self quarantine at home for the 14-day period as advised by the ASG Department of Health.

Visitors to Campus:

4. All visitors to campus should report to the Security Office at the Entrance of the Main Quad Area of the campus.

5. Gates will be closed for employees and students on Mondays through Fridays before 7:00am and after 6:00pm. During these hours of gate closure, all persons coming on campus need to park, pick-up, or drop-off at the front of entrance area only.

6. On Saturdays and Sundays the campus will be closed.

Physical Facilities / Sanitization

7. All employees will take all necessary measures to provide a clean and sanitary environment for all. All janitorial and custodial personnel will do a thorough cleaning and disinfection of facilities on a regular basis throughout the day.

8. All staff in charge of equipment in the work area or class area (computer labs, etc) will clean and disinfect equipment on a regular basis throughout the day.

9. The College will provide hand sanitizers, cleaning wipes, and disinfectants in restrooms and areas of congregation such as classrooms and laboratories.

10. All employees will encourage and promote and enact the hand washing and hand sanitization for the work staff and students.
Symptomatic Precautions

11. All employees, students, or visitors upon entrance on campus may be subject to a routine check by identified staff for coughing, fever, or shortness of breath or other signs of possible symptoms of COVID – 19 as indicated by the ASG Department of Health. IF positive response for these signs, the individual may be sent home and off campus.

12. Any person who may be experiencing symptoms as indicated should report it immediately and take steps toward social distancing.

Other Precautionary Measures

13. Avoid congregating in the halls at work
14. Possibly reduce staff to minimal number that can provide services needed for work from home
15. Encourage and implement teaching of good hygiene
16. Encourage all to practice social distancing (limited physical contact)

This is the ASCC Immediate Action Plan for COVID – 19 Preparations effective today March 12, 2020. ASCC’s Action Plan for instruction, work schedules, and other measures to prepare for COVID – 19 will be forthcoming.

xc: Board of Higher Education
13th March 2020

Ms Elizabeth Perri
Insurance Commissioner
By Email: eperri.asg.govoffice@gmail.com

Dear Ms Perri,

Re: Covid-19

On behalf of our Country Manager, Ms. Agnes Polu, and NPI General Manager, Ms. Joanne Rasmussen, I would like to provide you with a high-level summary relating to our organisational preparedness, business continuity, potential staff impact along with our initial business impact assessment, including re-insurance arrangements.

Organisational Preparedness

As part of Tower Insurance Limited (TIL), NPI American Samoa has a Pandemic Management Plan (PMP). With respect to the World Health Organisation’s “continuum of pandemic phases” we have assessed that we are in phase 3. As such, we are undertaking the relevant activities listed in the Appendix: “Preparedness: Phase 3”.

From a business continuity perspective, we have an established Crisis Management Plan and a business unit Business Continuity Plan (BCP).

Our BCP seeks to enable (a) continued operations as close to BAU as possible, and in the extreme (b) the bare minimum operational functional to enable the business to remain viable. Due to NPI being part of TIL, we have the advantage of our Pacific Operations Hub in Suva, 7 other Pacific Island jurisdictions along with Tower NZ to provide continuity services in an extreme situation.

Operational Continuity

In American Samoa, the vast majority of our customer interactions are face to face. As such we have undertaken a number of scenario assessments to test our operational continuity in the event:

- A staff member tests positive or has been in close proximity to someone who has tested positive
- Societal restrictions are imposed such as restriction to public transport or closing of schools
- Our government requests or requires that we amend our operating practices, for example, we must ensure that our staff sit a certain distance apart and take other practical measures to mitigate any possible spread
- We are requested or required to close our branches and go to skeleton staff with no public contact
- We are required to keep our staff at home

Our business priorities have been defined at a high level as:

- Ensuring continuation of payroll for our employees
• Processing claims for our customers
• Processing renewals for our customers
• Maintaining accounts payable on time for our suppliers
• Providing new business services

We are currently investigating the viability of enabling our staff to operate from home through procurement of new hardware and where required reallocation of laptops from non-essential staff to the frontline teams. This will enable us to increase the number of people able to service customers remotely. However, under these circumstances we do expect a degradation in customer service standards. In this case, we will redirect our landlines to company provided mobile telephones and increase public communications via our Facebook page supported by private communications via email. From a customer service perspective, priority will be given to insurance claims, followed by customer service enquires, sales, and then non-essential back office functions.

Potential Staff Impacts

We have and will continue to communicate with our staff through various channels (i.e. emails, our intranet page and people leaders communications). These communications include letting all staff know we have a plan in place, how to stay healthy, our stance on international business travel (we have put a stop to all non-essential international travel), and links to the latest advice from the NZ Ministry of Health and relevant Pacific Island health organisations.

As always, we will continue to monitor the well-being of our staff and provide support as required including flexible working and leave arrangements and directing staff to EAP support as required.

As of this week, all staff have been requested to stay at home if they feel unwell for any reason. We have also communicated that any staff who are off work caring for unwell family members should remain off work until the entire household is fully recovered. Where staff have exceeded their contractual entitlement of sick leave, they will be provided extended paid sick leave.

We are currently investigating the early roll out of our annual flu vaccination, subject to availability.

Staff leave (non-medical reasons) is being monitored so that the impact to the resourcing levels is minimized in the event of increased absences due to other staff member’s illness.

In addition to this, the needs of vulnerable staff members, such as those who are pregnant, have underlying medical conditions and those who live with elderly residents are being managed on an individual basis.

Stress Testing/Business Impact Assessment

A high-level review of our product wordings has been undertaken to understand the potential insurance risks associated with Covid-19. From the analysis done there is no material exposure. Some products may respond but the exposure is considered very limited.

Apart from insurance risk, other potential risks to Tower/NPI include:

• Reduction in GWP – following reduction in turnover within business, there is a potential for reduced GWP where rates are based on turnover,
• Moral hazard – possibility of fraudulent claims where businesses fall into financial difficulties,
• Increased demand on resource – managing queries from customers querying and/or trying to claim on policies that do not respond, and
• Revenue management – risk of customers defaulting on premium payments and/or cancelling their policies to reduce costs, and the cashflow impact of any inability to process premium payments through automated means.
The financial impacts of these risks to Tower/NPI have not been assessed as there isn't enough information to inform reasonable impact estimates. Having said that, the Tower/NPI Product Teams are monitoring the situation to identifying any emerging adverse experience.

**Reinsurance Arrangements**

As stated above, there is no material risk of increased claims arising from a pandemic. Hence, reinsurance considerations are not relevant to Tower/NPI.

**Community**

From a community perspective, our office has health notices prominently displayed, along with hand sanitisers. We are increasing the frequency and intensity of our office cleaning rotations. We have commenced the recording of all appointments with external parties and are recording visits by customers, contractors and members of the public via a visitor book so that we can contribute to the national health organisations tracing needs, if required.

In addition to this, we are currently investigating what additional community support we could provide in the event of an outbreak in American Samoa.

**Next Steps**

Over the coming week, Tower and NPI offices will be continuing to refine the PMP and BCP. If there is any material change to our position in this regard, we will bring this to your attention at the earliest opportunity.

Please do not hesitate to contact me should you require any further information,

Yours sincerely

Paula ter Brake

**General Manager – Pacific**

*Enc. PMP Phase 3*
### Preparedness: Phase 3

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<tr>
<th>PLANNING ACTIVITIES</th>
<th>STAFF HEALTH AND SAFETY ACTIVITIES</th>
<th>OPERATIONAL ACTIVITIES</th>
<th>COMMUNICATION ACTIVITIES</th>
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<tbody>
<tr>
<td>Review BCPs and plan and monitor activities to ensure implementation</td>
<td>Confirm with cleaning contractor that increased frequencies of cleaning can be provided, especially in the common areas e.g. meeting rooms, kitchens, reception, etc.</td>
<td>Assess business needs for continued face to face contact with customers/ suppliers and consider plans to modify the frequency or type of contact e.g. use teleconference</td>
<td>Arrange talks by medical experts on “staying healthy” - diet, exercise, cleanliness etc.</td>
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<td>Conduct regular situation monitoring and prepare regular status reports (define the distribution list)</td>
<td>Provide notices in washrooms to support good hygiene practices</td>
<td>Prioritise Business Unit processes and identify critical Staff / Skills inventory - review business procedures where necessary to cover Pandemic preparedness</td>
<td>Establish communications channel to handle staff queries and issues</td>
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<td>Train a pool of staff to deal with the special requirements of a pandemic</td>
<td>Identify Key suppliers of all goods</td>
<td>Develop communication guidelines around interacting with people who are actively managing business continuity activities</td>
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<td>Provide antiseptic wipes / gels in washrooms.</td>
<td>Monitor status of subcontractors.</td>
<td>Appoint a Pandemic Manager who will monitor the status of the Pandemic and keep the ELT informed.</td>
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<td>Prepare health declaration form, temperature log for health screening for staff, contractors, vendors and visitors</td>
<td>Identify personnel that may have additional risks associated with their role</td>
<td>Pandemic Manager to be notified of all cases identified within Tower/NPI if an employee feels sick at work, employee will be advised to leave work immediately. Pandemic Manager must contact the employee and conduct contact tracing to determine who needs to be contacted regarding a potential exposure to pandemic.</td>
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<td>Establish employee policies re flexible work arrangements (working from home) or flexible work hours (shift work)</td>
<td>Allocate remote access services in quarantine areas (i.e. Home) for critical staff / where required</td>
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<td>• Implement visitor log for ALL</td>
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<td>• Develop process for recovered or</td>
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